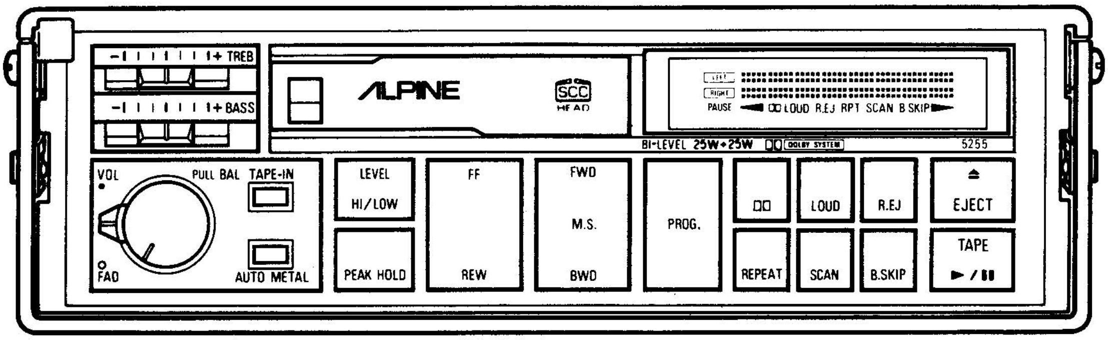
ALPINE SERVICE MANUAL

Cassette Deck

- "For the cassette deck mechanism parts (GR75E010) of this model, refer to the GR Series Service Manual (part No. 68P20504W01)."


TREB
BASS
ALPINE
SCC
HF AD
LEFT
RIGHT
PAUSE
LOUD R.EJ RPT SCAN B.SKIP
BI-LEVEL 25W+25W
DOLBY SYSTEM
5255
VOL
PULL BAL
TAPE-IN
FAD
AUTO METAL
LEVEL
HI/LOW
PEAK HOLD
FF
REW
FWD
M.S.
BWD
PROG.
REPEAT
LOUD
SCAN
R.EJ
B.SKIP
EJECT
TAPE
►/❚❚

5255

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Specifications

Wow & Flutter (JIS WARMS.MTT-111)	0.2%
Tape Speed (MTT-111)	4.76 cm/sec, +3%to-1%
Signal to Noise Ratio (MTT-212)	DOLBY OFF: 52 dB DOLBY B.ON: 58 dB
Distortion(MTT-118)	2%
Frequency Response (-3 dB Ref. 1 kHz, MTT256)	63 to 12,500 Hz
Separation (MTT-141)	30 dB
Crosstalk (MTT-121)	45 dB
Fast Forward & Rewind Time (C-60)	140 sec
Pre Output/Impendance (MTT-212)	1.2V/10 kohm
Speaker Output/Impendance (MTT-212)	9W/4 ohm
Power Supply	DC 14.4 V
Semiconductors	16 IC's. 45 Transistors. 19 Zener Diodes 22 Diodes
Dimension	Nosepice: 178(W) × 48(H) × 15(D) mm Chassis: 178(W) × 50(H) × 153(D) mm
Weight	1.2 kg

INTRODUCTION

The 5255 designed for in-dash installation and for negative ground power systems. It houses an array of features such as an illuminated cmputer-like control keyboard and selectable fader in its DIN size chassis. It also includes Alpine's exclusive Quick Release Bracket (QRB) with its reinforced connectors, that allows easy removal of the unit with as an anti-theft measure. Please read this owner's manual throughly to familiarize yourself with all the features and operation of the 5255.

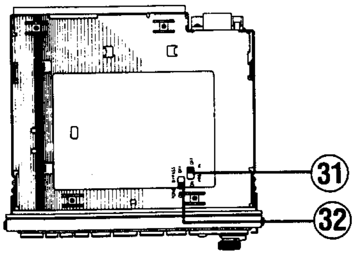
FEATURES

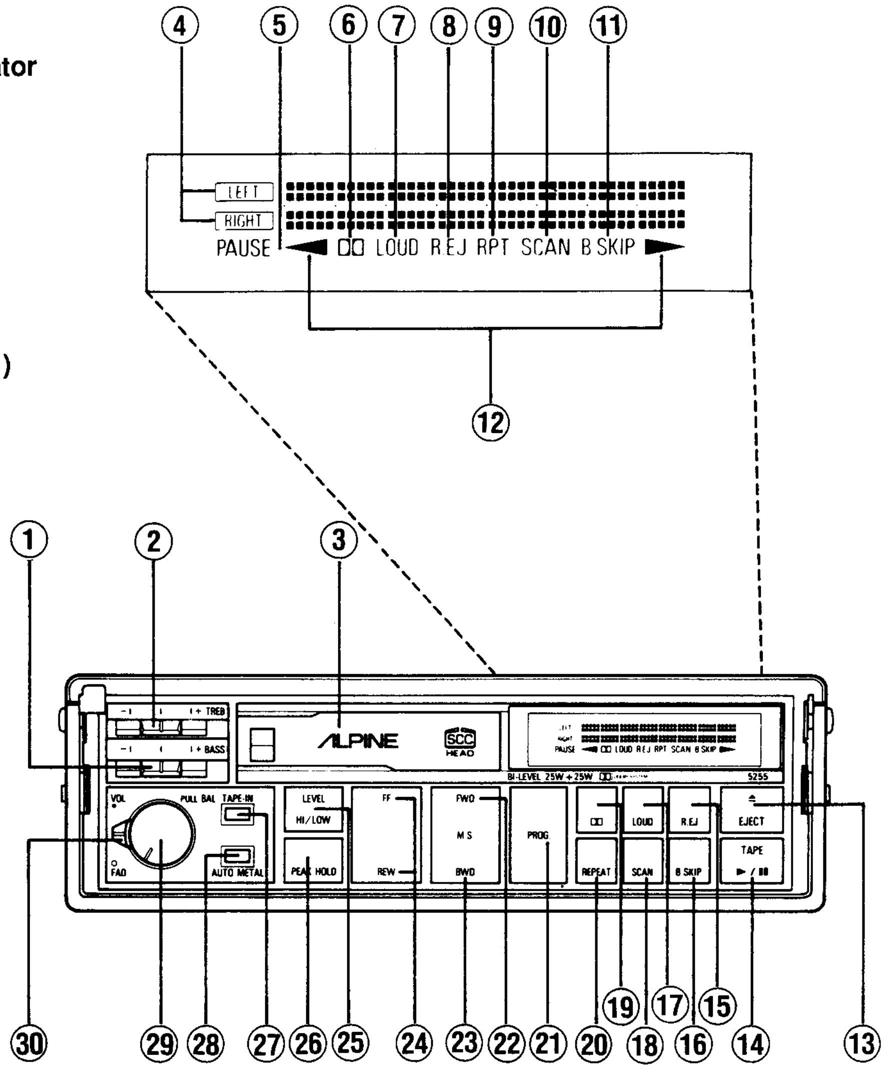
- **FULL FRONT DIN™**
- **QUICK RELEASE BRACKET (Q.R.B.)**
- **SOFT-TOUCH IC LOGIC CONTROLS:**
  Solenoid IC logic controls on the front panel and the built-in GR mechanism carry out function modes swiftly and quietly at the lightest touch.
- **HIGH POWER AMP BUILT-IN (20W + 20W)**
- **SCC TAPE HEAD™:**
  Provides extended tape head life, high frequency response, and is ideal for use with metal tape.
- **DOLBY* B NOISE REDUCTION:**
  Increases dynamic range of Dolby encoded tapes while reducing hiss, providing up to a 10dB improvement in noise reduction.
- **IGNITION "KEY-OFF" PAUSE:**
  The tape disengages from the tape head, capstan, and pinch roller when the ignition is turned off, but it remains inside the cassette compartment.
- **ONE TOUCH MUSIC SENSOR:**
  This feature allows you to automatically fast forward through the music selection currently palying, to the beginning of the next selection and then begins palyback. The deck will also automatically rewind back to the beginning of the current music selection and begin palyback.
- **REPEAT SWITCH:**
  This permits you to repeatedly palyback a piece of music you want to listen.
- **RETURN EJECT:**
  When both A and B sides of a cassette tape have been reproduced, the unit ejects the tape automatically.
- **AUTO METAL:**
  When a metal cassette tape is inserted, the tape mechanism automatically adjusts to metal tape equalization.
- **AUTO BLANK SKIP:**
  This feature fast forwards the tape to the next selection when a blank of more than15 seconds is detected between programs.
- **SELECTABLE FADER:**
  This system allows you to select either the pre-amp or power amp fader mode. The pre-amp fader controls the signal level in the pre-amp stage for two amplifers, and the power amp fader balances the front and rear speaker sound in a four-speaker system.
- **PRE-IN ON/OFF SWITCH**
  The bulit-in pre-in circuit allows you to easily make a 4-speakers system by combining the CD player.
- **CASSETTE AUTO REVERSE**
- **SEPARATE BASS & TREBLE CONTROL**
- **LOUDNESS SWITCH**
- **DIMMER CONTROL**
- **40-DETENT VOLUME CONTROL**
- **BALANCE CONTROL**

* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

Controls & Indicators

① **BASS Control**
② **TREBle Control**
③ **Cassette Loading Slot**
④ **LEFT/RIGHT Output Level Indicator**
⑤ **PAUSE Indicator**
⑥ **Dolby NR Indicator**
⑦ **LOUDness Indicator**
⑧ **Return EJect (R. EJ) Inidcator**
⑨ **RPT (Repeat) Indicator**
⑩ **SCAN Inidcator**
⑪ **B. SKIP (Blank Skip) Indicator**
⑫ **Tape Direction Indicators (◄, ►)**
⑬ **EJECT Switch (⏏)**
⑭ **TAPE Switch (Play ► /Pause ❚❚)**
⑮ **R.EJ (Return EJect) Switch**





④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪
LEFT
RIGHT
PAUSE
LOUD
R EJ
RPT
SCAN
B SKIP
⑫
① ② ③
TREB
BASS
ALPINE
SCC HEAD
BI-LEVEL 25W+25W
5255
VOL
PULL BAL
TAPE-IN
AUTO METAL
FAD
LEVEL
HI/LOW
PEAK HOLD
FF
REW
FWD
M S
BWD
PROG
LOUD
R.EJ
EJECT
REPEAT
SCAN
B SKIP
TAPE
►/❚❚
⑲ ⑰ ⑮
㉚ ㉙ ㉘ ㉗ ㉖ ㉕ ㉔ ㉓ ㉒ ㉑ ⑳ ⑱ ⑯ ⑭ ⑬

Figure 1

⑯ **B.SKIP (Blank Skip) Switch**
⑰ **LOUDness Switch**
⑱ **SCAN Switch**
⑲ **Dolby NR Switch**
⑳ **REPEAT Switch**
㉑ **PROGram Switch**
㉒ **FWD (Forward) Switch (M.S. (Music Sensor))**
㉓ **BWD (Backward) Switch**
㉔ **FF (Fast Forward)/REW (Rewind) Switch**
㉕ **HI (High)/LOW Switch**
㉖ **PEAK HILD Switch**
㉗ **TAPE-IN Indicator**
㉘ **AUTO METAL Indicator**
㉙ **VOLume Control/BALance Control (PULL)**
㉚ **FADER Control**

㉛ **PRE-IN ON/OFF Switch**
With this switch in the ON position, the Deck portion of the unit is electronically separated from the internal amplifier. This allows you to add an Alpine CD player or signal processor to the system while utilizing the 5255's built-in power (Pre-In On/Off). If you are not using this type of system configuration, set this switch to the OFF position.

㉜ **TONE BYPASS Switch**
The unit is equiooed with TONE BYPASS switch. If you have another means in your audio system to control tones, set the switch to "on" position. In this mode, the tone control circuitry in the unit is bypassed.

Connections

CAUTIONS:

1. Before connecting any wire, be sure to comfirm the engine key to be OFF position and then remove the ⊖ terminal of the car battery to prevent a shortcircuit accident.
2. Be sure to connect the ACC power lead (red) and the battery lead (yellow) to the designated position. Never connect them to the same position together.
3. Before beginning instalation and connection, poperly set the PRE-IN ON/OFF switch and the TONE BYPASS switch located on the bottom of the deck.

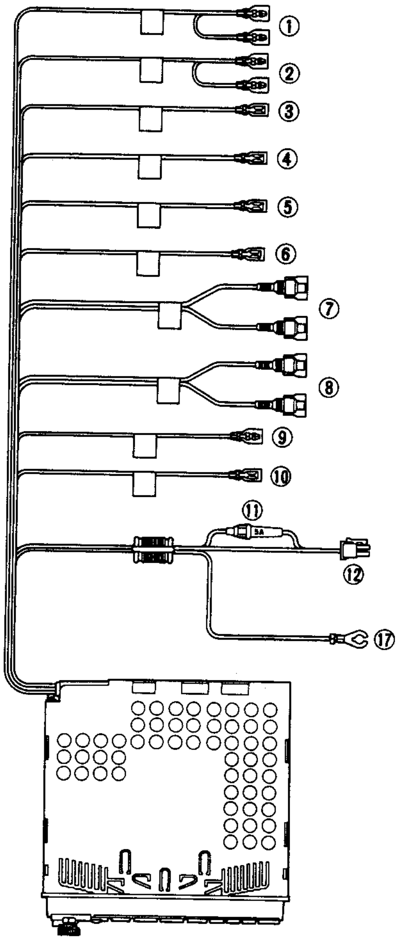


Figure 2

①Left Speaker Output Lead (-) (White/Black)

②Right Speaker Output Lead (-) (Gray/BlacK)

③Left Front Speaker Output Lead (White)

④Right Front Speaker Output Lead (Gray)

⑤Left Rear Speaker Output Lead (Green)

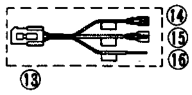
⑥Right Rear Speaker Output Lead (Violet)

⑦Output RCA Type Connectors (Right; Red/Left; White)
This connectors are for connecting an Alpine CD player etc. with RCA type input connectors by using the extension cable (supplied to 5255).

⑧ Input RCA Type connectors (Rgith; Red/Left; White)
This connectors are for connecting an Alpine CD player etc. with RCA type output connectors by using the extension cable (supplied to the CD player etc.)

⑨ Dimmer Control Lead (white/Blue)

⑩ Audio Interrupt In Lead (Pink/White)
Applying (+)12V to this lead mutes the audio output.



⑪ Fuse Holder (5A)

⑫ Power Supply Connector

⑬ Power Wiring Harness (Supplied to 5255)
This is not used when connecting an Alpine CD palyer etc.

⑭ Remote ON Lead (Blue/White)
If the unit is connected to your Amp unit with RCA connectors, connect the remote ON lead to the male connector of the remote ON lead of your amp.

⑮ ACC POWER Lead (Red)
This lead is to be connected to an ignition terminal in the vehicle's fuse box or a terminal which develops +12V when the ignition is turned on.

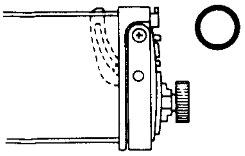
⑯ Battery Lead (Yellow)
Connect this lead to the positive battery terminal on the vehicle or another constant +12V suorce (fuse block or factory radio provision).

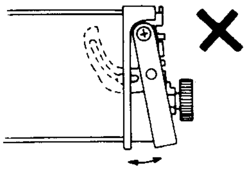
⑰ Ground Lead (Black)
This lead is to be connected to the car chassis and the ground terminal of the 5255.

PRECAUTIONS

1. When replacing the fuse(s) , the replacment fuse must be of the same amperage as shown on the fuse holder. If the fuse(s) blows more than once, carefully check all electrical connections for shorted circuitry. Also have your car's voltage reagulator checked. Do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.
2. In order to ensure proper performance, be sur the temperature in your car is within the range of 14°F (-10°C) to 140°F (60°C) before turning your player on. Good air circulation is essential, especially in hot weather, to prevent internal heat build-up in the unit.
3. C-120 type cassette tapes are not recommended for use in automobile tape players.
4. Prevent any foregin objects from entering the cassette opening as the percision mechanism and tape head may be damaged.
5. To protect your cassette tapes, store them in a cool place away from dust, dirt, direct sun and strong magnetic sources such as electric motors speakers and TV sets.
6. Check and make sure any slack in the tape is taken up before inserting the tape into the unit. A loose tape could cause damage to the unit and the tape itself. Tighten the cassette by inserting a pencil or a similar instrument into the spindle hole and turn until all the slack has been taken up.

CAUTION: In the event of road vibration or rapid acceleration or vehicle collision, this unit may become dislodged from its case unless ther handle is fully down. This could result in personal injury to occupants of the vehicle or physical damage to the unit. Please see the illustrations below for further information on how to properly secure the handle.





CLEANING

When palyback sound begins to deteriorate, it is time to clean the palyback head. Insert a special head cleaning cassette into the tape-loading slot and allow it to run for a few minutes to remove any foreign matter.

INSTALLATION

1. Remove the unit from the bracket.
2. Connect the lead wires coming from the left rear of the bracket by referring to the Connection Section, then slide the bracket into the dashboard. Bend out the tabs along the top, bottom, and sides of the bracket to strengthen the mounting.
3. Install the metal mounting (back) strap supplied, as shown in Figure. 3. The strap can be attached to the vehicle above or below the QRB bracket.
4. Fully insert the unit into the bracket and push the handle downward to lock the unit. To remove the unit, raise the handle to unlock the pins, and firmly pull the unit toward you. If the handle is not easy to raise by hand, press the Handle lever (▲) (Figure. 3).

Note:

1. Secure the ground lead of the bracket to a clean metal spot using a screw (★) already attached to the car chassis (Figure. 4).
2. Always reinforce the installation of a removable head unit's bracket with the metal mounting strap (Figure. 3). Otherwise, after repeated removal and insertion of the unit, the bracket may become loose in the dashboard.
3. Before operating the unit, make sure the unit is completely inserted into the bracket and the handle is full down as shown in Figure. 5. This is especially necessary in the case of excessive road vibration, rapid acceleration or vehicle collision because the unit may come out of the bracket if it is not locked into place (Figure. 6). This could result in personal injury to the occupants of the vehicle or physical damage to the unit.

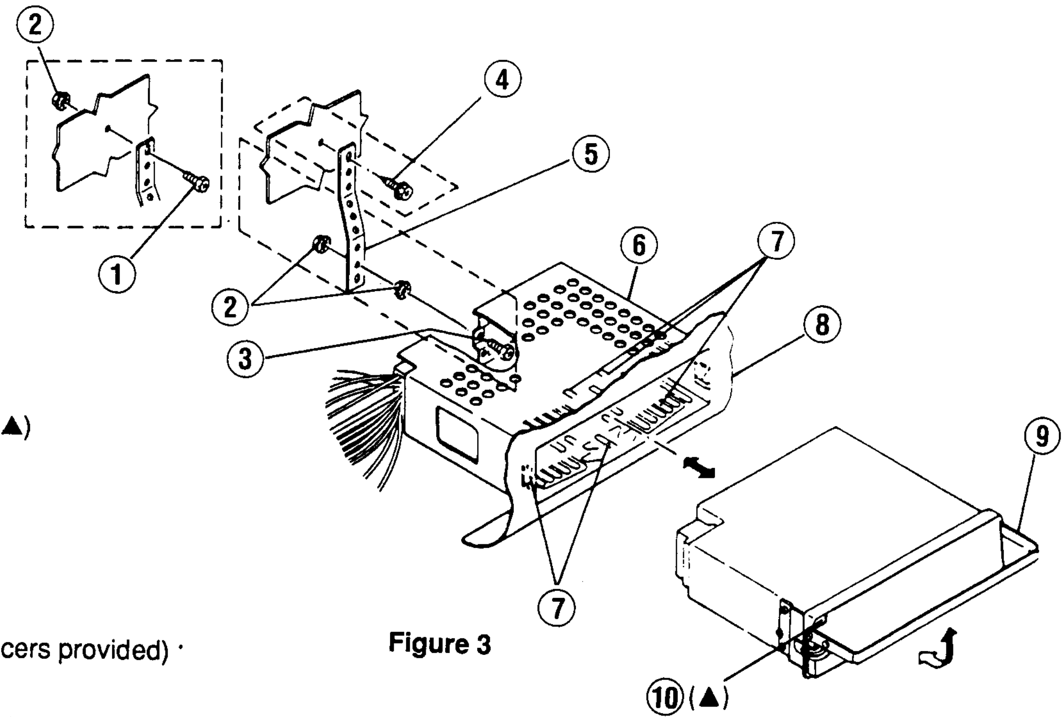
Permanent Installation of QRB Unit

Remove the 18-pin plug assembly from the bracket. Using the 2 screws and 2 spacers provided, connect the plug assembly directly to the unit (Figure. 7). Set the TONE BYPASS and PRE-IN ON/OFF switches to your desired positions. Install the optional accessory kit (Alpine 4100) as shown in Figure. 8. Use the mounting sleeve from the 4100 Kit instead of the QRB bracket.

NOTE:

Be sure to connect the ground lead (black) to the unit chassis using the screw supplied.

① Hex Bolt (M5 × 10)
② Hex Nut (M5)
③ Hex Bolt (M5 × 14)
④ Self Tapping Screw (M5 × 15)
⑤ Metal Mounting Strap
⑥ Bracket
⑦ Tabs



⑧ Dashboard
⑨ Handle
⑩ Handle Lever (▲)
⑪ Ground Lead
⑫ Chassis
⑬ Locking Pins
⑭ Secured
⑮ Unsecured
⑯ Spacers (2 spacers provided) ·
⑰ Screws
⑱ Mounting Sleeve
⑲ Front Trimplate
⑳ Bracket Support for Mounting Sleeve

Figure 3

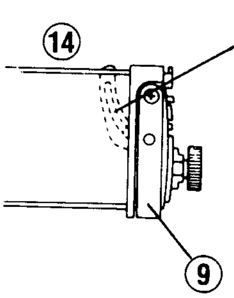


Figure 5

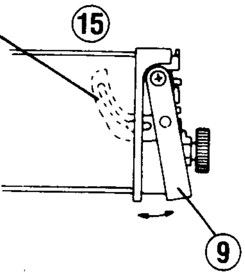


Figure 6

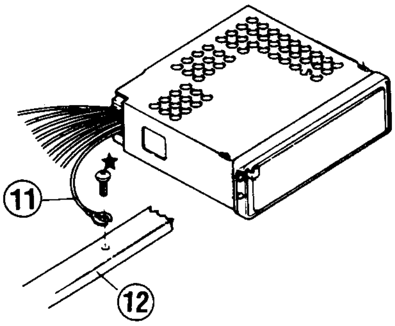


Figure 4

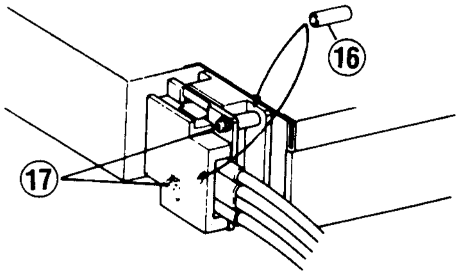


Figure 7

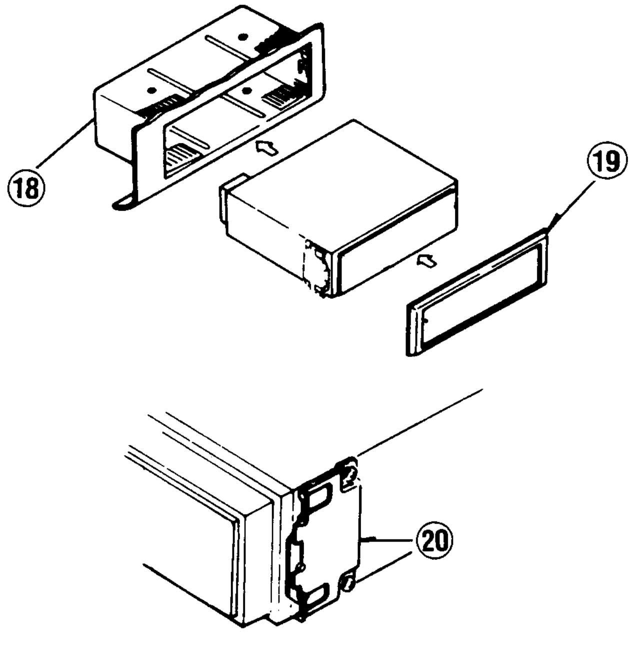
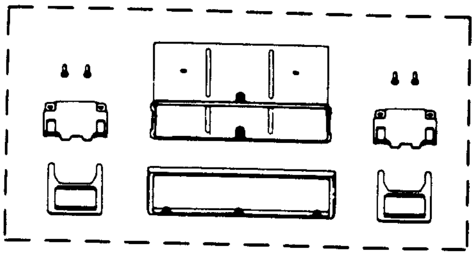


Figure 8

MODEL 4100



Operation

<BASIC OPERATION>

1. **Power ON/Off**
   The power will be automatically turned on by inseting a cassette tape into the cassette loading slot.③
2. **Volume Control** ㉙
- To increase sound volume; Rotate clockwise.
- To decrease sound volume; Rotate counterclockwise.
3. **Bass①and Treble②Controls**
- To enhance each tone; Slide from the left to the right.
- To attenuate each tone; Side from the right to the left.
4. **Balance Control** ㉙
   Pull the control toward you and rotate this control to balance the sound volume between the left and right speakers.
- To increase the left; Rotate counterclockwise
- To increase the right; Rotate clockwise

   Fader Control ㉚
   Rotate the control to balance the sound volume between the front and rear speakers.
- To increase the front volume; Rotate clockwise.
- To increase the rear volume; Rotate counterclockwise.

<BASIC OPERATING PROCEDURES>

1. With the tape opening to the right, insert a pre recorded cassette tape into the cassette loading slot③as far as it will go. One of the tape direction indicators ⑫ and the TAPEE-IN indicator ㉗ will light. The tape will start playing.
   - If a metal or CrO_2cassette tape is inserted, the tape mechanism automatically sets itself for 70 µsec equalization. The AUTO METAL indicator ㉘ will light.
   - If a Dolby B-encoded tape is used, press the Dolby NR switch ⑲ to activate this NR feature. The Dolby NR indicator ⑥ will light.
2. Adjust the VOLume ㉙, BASS①, TREBle②, BALance 29 and FADer 30 controls to suit your listening preference. If required, press the LOUD switch ⑰ and the LOUD indicator ⑦ will light.
3. To change from side A to play side B or vice versa before the end of the tape is reached, press the PROGram switch㉑. The tape running direction automatically reverses at the end of the tape.
4. To temporarily stop tape paly, press the TAPE switch ⑭. The PAUSE indicator⑤ will light.
   To resume tape play, press the TAPE switch ⑭ again.
5. To stop tape play and eject the cassette, press the EJECT switch⑬.

<CONVENIENT FUNCTIONS FOR OPERATION>

- **Loudness Switch**
  If required to listen to in low volume (in the midnight, etc.), press the LOUD switch ㉚ to boost low fequencises at low volume levels. To remove this compensation, press the switch again.

- **Fast Forward and Rewind**

1. Press the FF switch ㉔ and the tape will advance rapidly.
   Press the REW switch ㉔ and the tape quikly rewinds.
2. Lightly press the same switch again or press the TAPE switch ⑭ to defeat the FF/REW function.
3. When the FF/REW operation reaches the end of the tape, the mode will automatically switch to playback.

- **Music Sensor**
  To play the next selection on the tape, press the FWD switch ㉒. In seconds after it is pressed, the Music Sensor will automatically locate the beginning of the next selection on the tape and will then return to the paly mode. To return to the beginning of the selection you are listening to, press the BWD switch ㉓ and the tape will return to the start of the selection and begin playing.
  Note: If the blank portion between the selections is less than 4 seconds or within 2 seconds after starting palyback of a selection, the Music Sensor does not function.

- **Scan**
  This function allows palyback of the first ⑩ seconds of each selection on the tape in succession and at the same time, the SCAN indicator ⑩ will light. This function is useful in searching for a specific program ahead on a tape. A second push of the SCAN switch ⑱ or pressing the TAPE switch ⑭ deactivates the function.

- **Repeat**
  The repeat feature allows you to continuosly paly back a single selection.

1. Press the REPEAT switch ⑳ and the RPT indicator ⑨will light.
2. The music currently playing will be palyed back repeatedly.
3. To stop repeat playback, press the REPEAT switch ⑳ a second time.

- **Blank Skip**
  This function senses a non recorded portion continuing for more than 15 seconds on tape and fast forwards the tape to a beginning of next program or to the tape end. Press the B. SKIP switch ⑯ to activate the blank skip function and the B. SKIP indicator ⑪ will light. Press again the B. SKIP switch ⑯ to deactivate the blank skip function.

- **Output Level Indicator**

1. Insert the cassette tape and begin playback.
2. The indicators ④ display the instantaneous left and right output levels.
3. Press the PEAK HOLD switch ㉖ . The indicators ④ hold displaying the maximum peak output level for a second.
4. Observing the lighting spread on the indicatos, adjust the display level by using the HI/LOW switch ㉕.

- **Return Eject**

1. Inset the cassette tape and begin playback.
2. Press the R. EJ switch ⑮ during the following mode, the cassette tape will be automatically ejected. The R. EJ indicator ⑧ will light.
   - Playback mode; After both sides A and B have been played.
   - Fast Forward mode; After the other side has been palyed.
   - Rewind mode; After both sides A and B have been palyed.
3. To cancel the return eject mode, press the R.EJ switch ⑮ again.

- **Mutually Preferential Function**
  This function means that the currently operating until has a preferential operation mode rather than any combined unit. If the 5255 is combined with an Alpine CD palyer (cassette radio or DAT palyer) with the mutually preferential function, any palyback mode can be selected by pressing the desired function switch on the CD player (cassette radio or DAT palyer).

For example; If a compact disc is inserted in the CD palyer while a cassette tape is being played on the 5255, the CD player will automatically be set to the play mode. The reverse is also same.

NOTE: The 5255 power is automatically turned on even if a cassette tape is not inserted into the deck by turning on the power of the CD palyer combined with the 5255.

Disassembly Instructions

1. Removal of Bracket Handle and Top Cover.

(1) Remove four screws marked "●" as shown in Figure 9.
Pull out the bracket handle in the arrow 1 direction as shown in Figure 9.

(2) Remove two screws marked "▲" as shown Figure 9.
Pull out the top cover in the arrow 2 direction as shown in Figure 9.

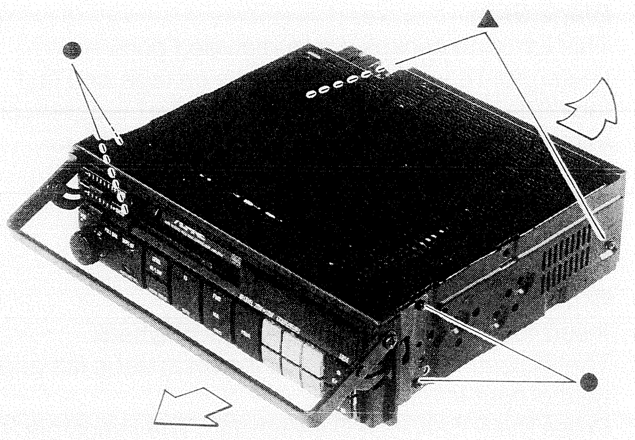


Figure 9

2. Removal of NosePiece

(1) After removal of top cover, remove two control knobs (Volume, Balance, Fader) and two slide knobs as shown in Figure 10.

(2) Remove five hooks (A) as shown in Figures 10 and 11.

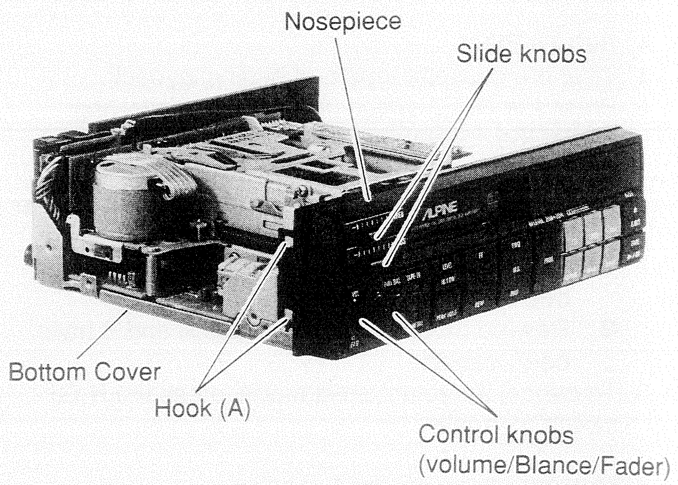

Nosepiece
Slide knobs
Bottom Cover
Hook (A)
Control knobs
(volume/Blance/Fader)

Figure 10

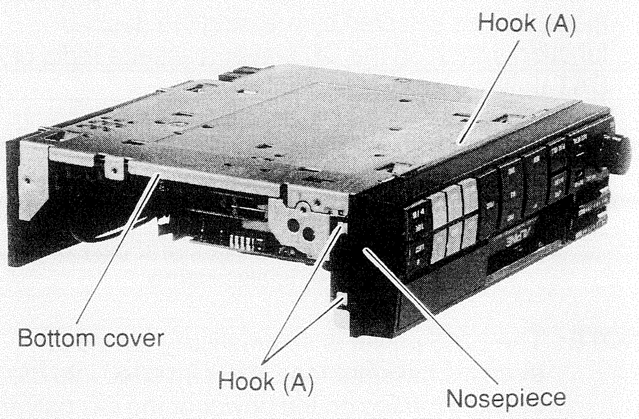

Hook (A)
Bottom cover
Hook (A)
Nosepiece

Figure 11

3. Removal of Cassette Deck

(1) After removal of he nosepiece, remove four screws marked "O" as shown in Figure 12.

(2) Disconnect a connector from the Main P. C. Board.

4. Removal of Main P. C. Board.

(1) After removal of cassette Deck, Heat sink and Front P. C. Board, remove the solder (A) and four screws marked "Δ" as shown in Figure 14.

(2) Remove the bottom cover with Rear chassis and QRB connector, by disconnecting all wires from the main P. C. Board.

(3) Remove the solder (B) and four hooks (B) as shown in Figure 13.

(4) Remove the Nut and washers marked "❐" as shown in Figure 13.

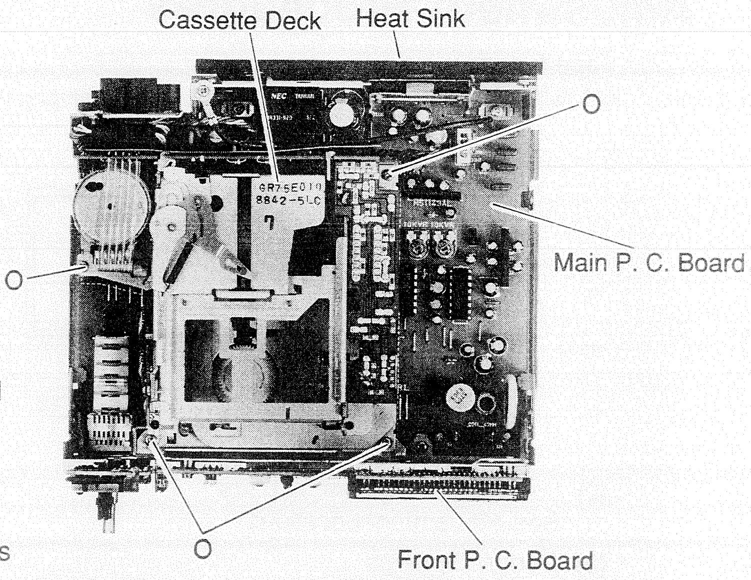

Cassette Deck
Heat Sink
O
Main P. C. Board
O
O
Front P. C. Board

Figure 12

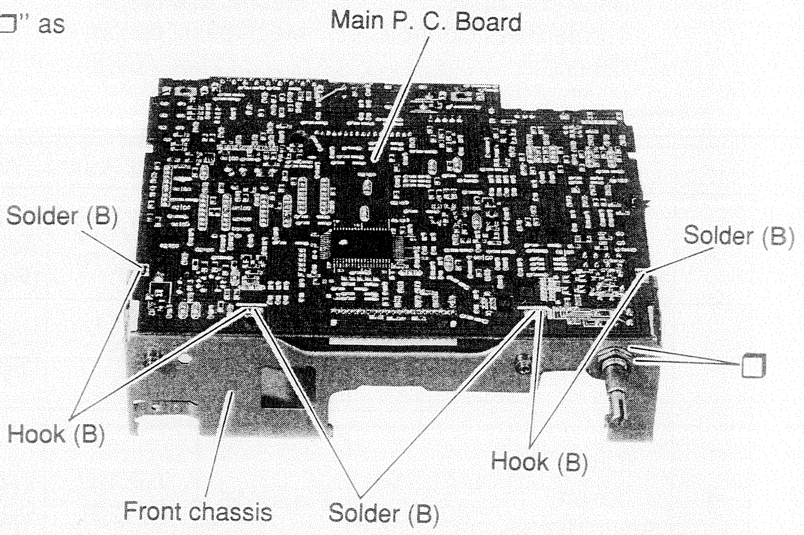

Main P. C. Board
Solder (B)
Solder (B)
❐
Hook (B)
Hook (B)
Front chassis
Solder (B)

Figure 13

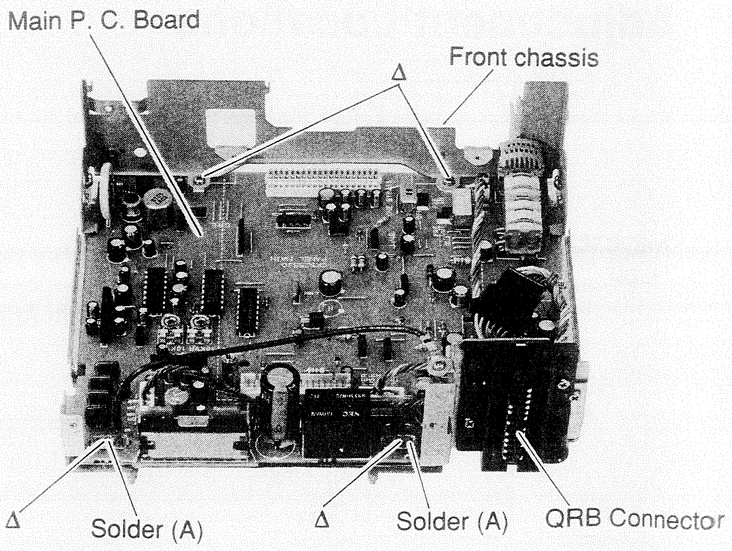

Main P. C. Board
Front chassis
Δ
Δ
Solder (A)
Δ
Solder (A)
QRB Connector

Figure 14

Adjustment Procedures

1. Tape Player
   (1) Connection

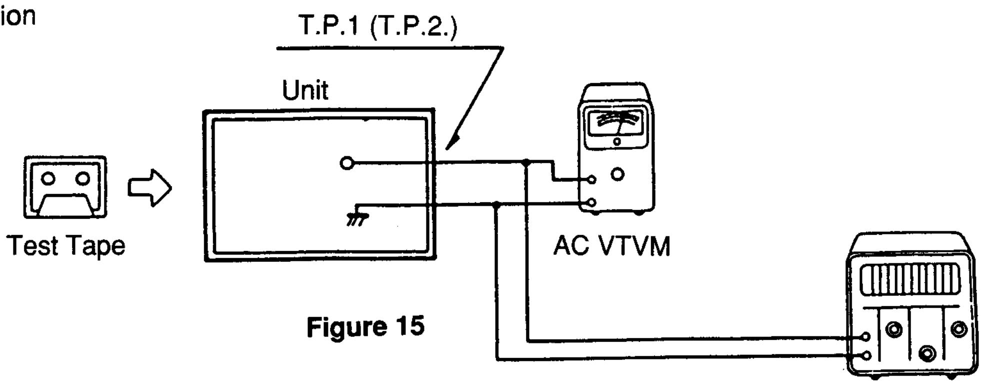

T.P.1 (T.P.2.)
Unit
Test Tape
AC VTVM
Frequency Counter

Figure 15

(2) Location of Adjustment parts
See Adjustment Locations

(3) Control Settings
Power Switch .... ON
Fader Control .... Front Position
Balance Control .... Mechanical center
Treble/Bass Control ..... Mechanical center
Others .... OFF

2. Adjustment Procedures

Step	Description	Test Tape	Connection	Test Point	Adjustment Point	Adjustment
1	Head Azimuth Adjustment	MTT-114NB (14 kHz)	Figure 15	T.P.1(L) T.P.2(R)	Head Azimuth Adjustment Screw (Figure 16)	To obtain maximum output at L /R ch and same output lever at Normal/Reverse side.
2	Tape Speed Adjustment	MTT-111 (3 kHz)	Figure 15	T.P.1 or T.P.2	Volume (Figure 17)	To obtain from 2,970 to 3,090 Hz on Frequency Counter.
3	Dolby Level Adjustment	MTT-150 (400 Hz)	Figure 15	T.P.1(L) T.P.2(R)	VR101 (L) VR102 (R)	To obtain 245mV±1 dB output at T.P.1 and T.P.2.

Adjustment Locations

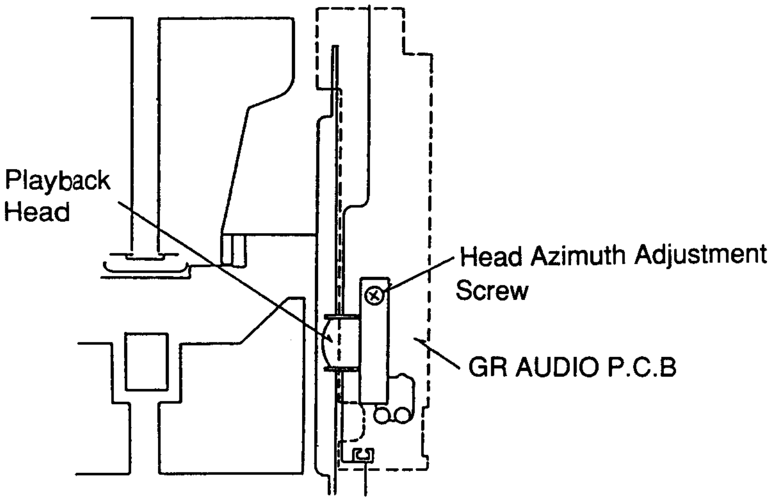

Playback Head
Head Azimuth Adjustment Screw
GR AUDIO P.C.B

Figure 16

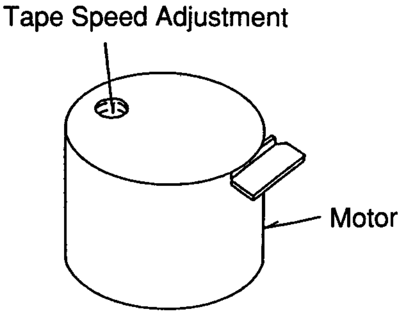

Tape Speed Adjustment
Motor

Figure 17

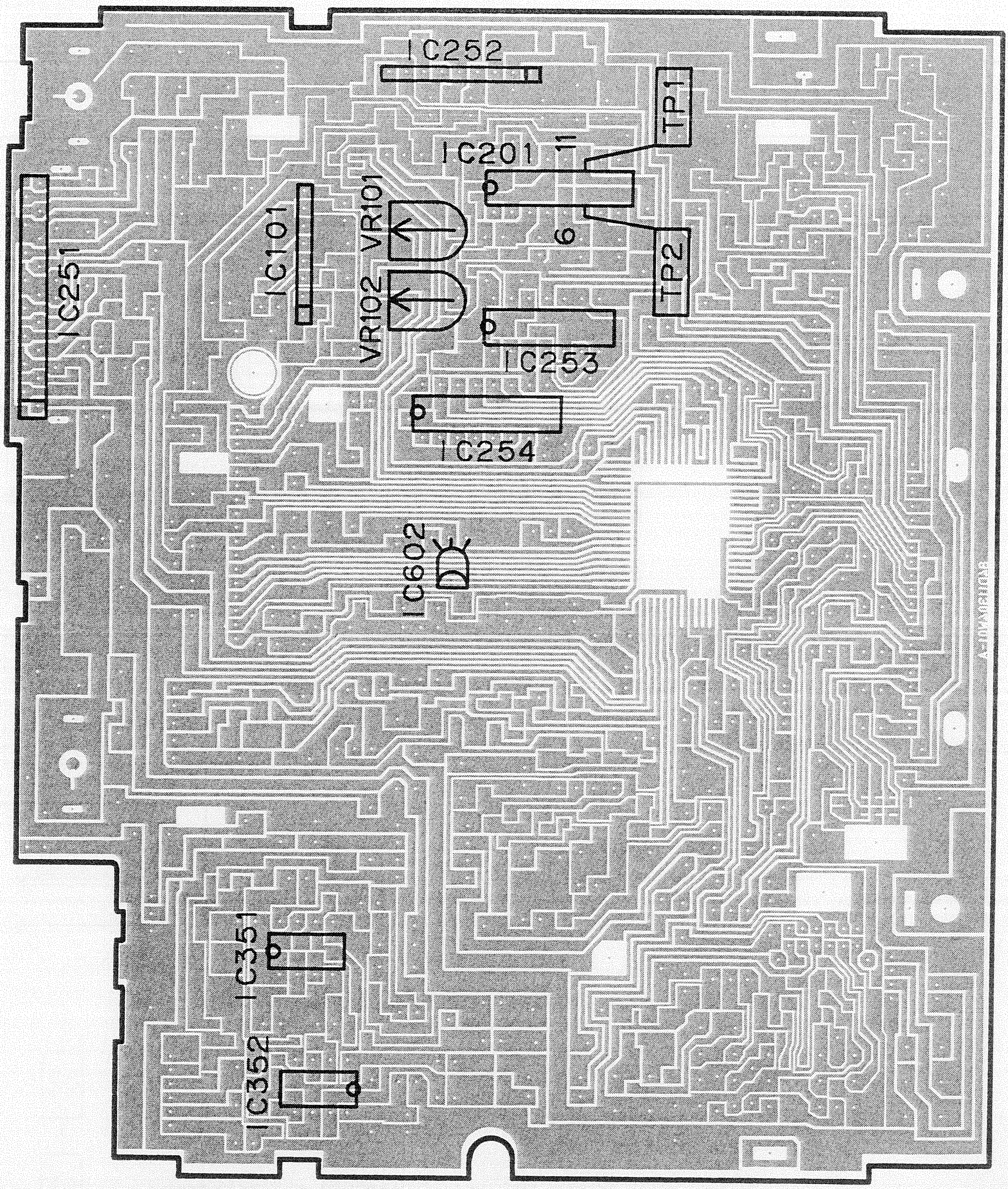
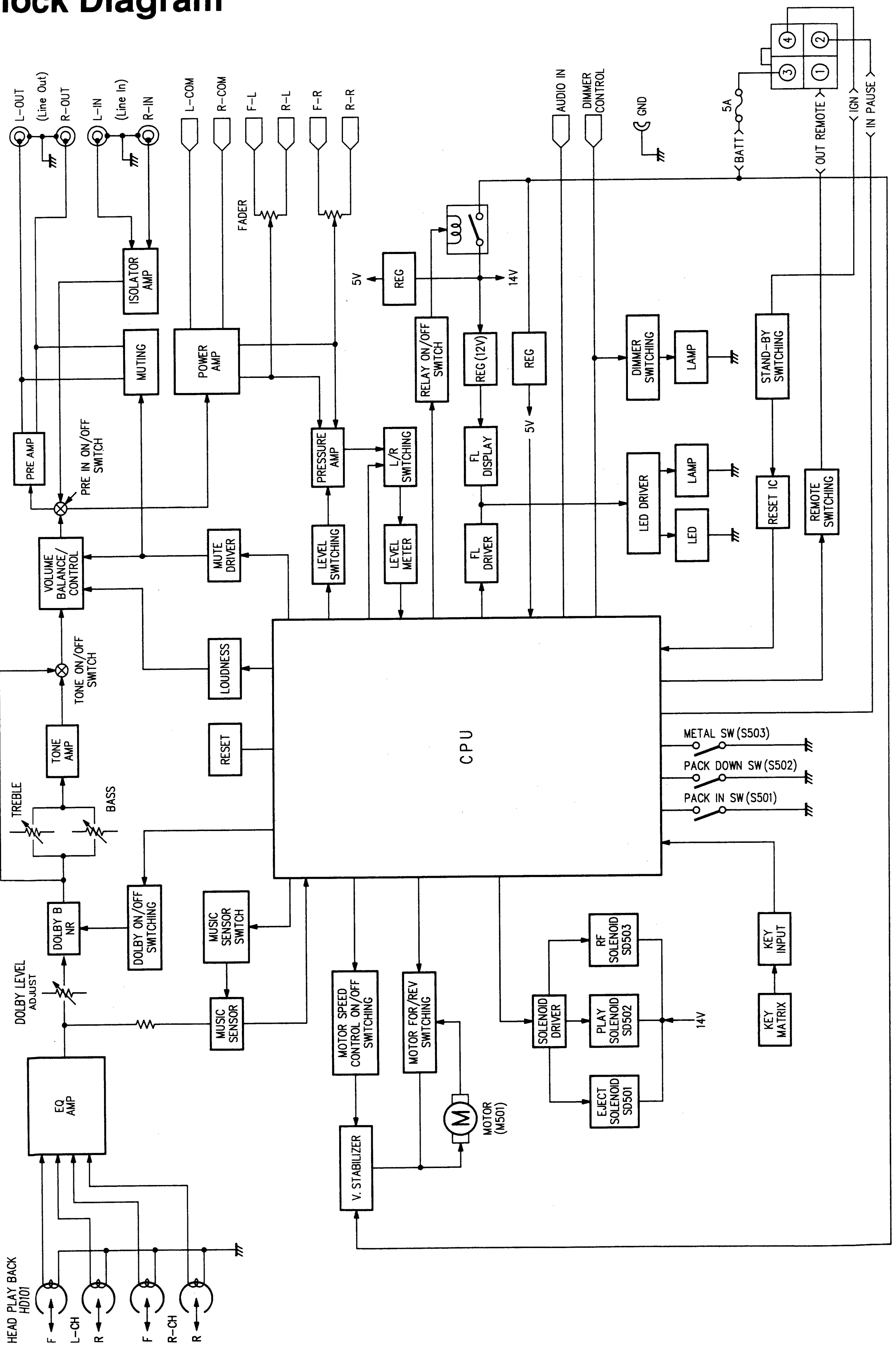

IC252
TP1
IC201
11
6
TP2
IC251
IC101
VR101
VR102
IC253
IC254
IC602
IC351
IC352

Figure 18 Main P.C. Board (Component side)

Block Diagram


L-OUT
(Line Out)
R-OUT
L-IN
(Line In)
R-IN
L-COM
R-COM
F-L
R-L
F-R
R-R
FADER
AUDIO IN
DIMMER CONTROL
GND
5A
BATT
OUT REMOTE
IGN
IN PAUSE
④
②
③
①
ISOLATOR AMP
MUTING
POWER AMP
PRE AMP
PRE IN ON/OFF SWITCH
VOLUME BALANCE/ CONTROL
MUTE DRIVER
LOUDNESS
RESET
TONE ON/OFF SWITCH
TONE AMP
TREBLE
BASS
DOLBY B NR
DOLBY ON/OFF SWITCHING
MUSIC SENSOR SWITCH
MUSIC SENSOR
DOLBY LEVEL ADJUST
EQ AMP
HEAD PLAY BACK HD101
F
L-CH
R
F
R-CH
R
5V
REG
14V
RELAY ON/OFF SWITCH
REG (12V)
REG
5V
PRESSURE AMP
L/R SWITCHING
LEVEL SWITCHING
LEVEL METER
FL DISPLAY
FL DRIVER
DIMMER SWITCHING
LAMP
LED DRIVER
LAMP
LED
STAND-BY SWITCHING
RESET IC
REMOTE SWITCHING
CPU
METAL SW (S503)
PACK DOWN SW (S502)
PACK IN SW (S501)
MOTOR SPEED CONTROL ON/OFF SWITCHING
MOTOR FOR/REV SWITCHING
V. STABILIZER
M
MOTOR (M501)
SOLENOID DRIVER
RF SOLENOID SD503
PLAY SOLENOID SD502
EJECT SOLENOID SD501
14V
KEY INPUT
KEY MATRIX

Schematic Diagram (1/3)

IC101

1	1.4V
2	1.4V
3	0V
4	1.4V
5	0V
6	0V
7	0V
8	0V 5.3V

FWD / PLAY

	IC251	IC254	IC401
1	14.2V	—	—
2	4.7V	—	—
3	4.7V	—	—
4	14.2V	—	5V
5	0V	—	5V
6	4.7V	—	5V
7	4.7V	5.2V	0V
8	4.7V	—	0V
9	14.2V	—	—
10	14.2V	14.1V	—
11	5.7V	0.7V	—
12	5.8V	5V	—
13	0V	5V	5V
14	0V	5V	—
15	5.8V	5V	5V
16	5.7V	0V	5V
17	14.2V		

NOTE
1. All resistance values are in ohms. K=1,000 M=1,000,000
2. All capacitance values are in microfarads. $P=\frac{1}{1,000,000}$

Voltage Measuring Conditions
1. Power Supply Voltage :DC14.0V
2. Measuring Meter :Digital Multimeter
3. Measuring Point Reference :Between Ground
4. Measuring Conditions :Tape -- Blank
FM -- 98.1MHz
AM -- 999kHz

	IC252	IC301	IC351	IC352
1	0V	7.1V	6.3V	6.3V
2	5.4V	7.1V	6.3V	6.3V
3	0.6V	7.1V	6.1V	6.3V
4	2V	0V	0V	0V
5	0V	7.1V	6.2V	6.3V
6	2V	7.1V	6.3V	6.3V
7	0.6V	7.1V	6.3V	6.3V
8	0V	13.7V	13.1V	13.1V
9	14.2V			

IC201

	DOLBY ON	DOLBY OFF
1	3.4V	3.4V
2	6.9V	6.9V
3	3.4V	3.4V
4	3.5V	3.5V
5	0.5V	6.8V
6	3.6V	3.6V
7	0.6V	0.6V
8	3.6V	3.6V
9	3.6V	3.6V
10	0.6V	0.6V
11	3.6V	3.6V
12	6.8V	6.8V
13	1.3V	1.3V
14	3.5V	3.5V
15	0V	0V
16	3.5V	3.5V

IC253

1	—	
2	—	
3	—	
4	—	
5	0V	
6	0V/5V	L/R
7	0V	
8	0V	
9	0V	
10	0V	
11	0V	
12	5.2V/0V	L/R
13	0V	
14	5.4V	

IC602

1	4.94V
2	4.94V
3	0V

IC603

1	4.9V
2	5V
3	0V

GR AUDIO P.C.Board
IC1201

1	13.1V
2	3.1V
3	4.9V
4	3.1V
5	2.9V
6	2.9V
7	2.9V
8	0V
9	2.9V
10	—
11	2.9V
12	2.9V
13	2.9V
14	3.1V
15	0.1V
16	3.1V

IC601

	ON/OFF	MODE
1	—	
2	4.9V/	PACK IN
3	4.9V/0V	PLAY
4	4.9V/0V	FF/PLAY
5	4.9V/0V	EJ/PLAY
6	4.9V/0V	FF/PLAY
7	4.9V	RESET
8	2.5V	X2
9	2.4V	X1
10	4.9V/0V	FWD/PLAY
11	4.9V/0V	FF/PLAY
12	4.9V/0V	PLAY/PAUSE
13	4.9V/0V	FOR/REW
14	4.9V/0V	PACK IN/OUT
15	5V/0V	METAL/NORMAL
16	5.4V/0V	PLAY/FWD
17	5.4V/0V	PLAY/FWD
18	—	
19	—	
20	—	
21	—	
22	4.9V/0V	LOW/HI
23	4.9V/0V	R/L
24	4.9V/0V	ON/OFF
25	0V	KEY P/S
26	0V	GND
27	0V	GND
28	0V	GND
29	5.2V	ACC
30	0V	GND
31	5V	AD5
32	5V	AD4
33	5V	AD3
34	5V	AD2
35	0.7V	AD1
36	5.2V/0V	DIM ON/OFF
37	—	
38	—	
39	—	
40	4.9V	
41	—	
42	—	
43	—	
44	4.9V	BATT
45	—	
46	—	
47	—	
48	—	
49	—	
50	—	
51	—	
52	1V/0V	LOUD ON/OFF
53	5V	POWER
54	5V	
55	5V	
56	5V	
57	4.9V	VDD
58	4.9V	
59	4.9V	POW CONT
60	4.9V/0V	MUTE ON/OFF
61	4.9V/0V	TAPE/DQ
62	4.9V/0V	RADIO/TAPE
63	5.3V/0V	
64	5.2V/0V	DQ /TAPE

IC402

		DIM			DIM
1	0V	L7	23	0V	R1
2	12V	S0	24	—	
3	0V	L8	25	—	LOAD
4	0V	R8	26	0V	GND
5	12V	S9	27	4.9V	C.E
6	—		28	—	TEST
7	0V	R7	29	12.1V	VDD
8	0V	S8	30	—	DATA
9	0V	R6	31	—	CLOCK
10	0V	S7	32	0V	S2
11	0V	R5	33	0V	S1
12	0V	S6	34	0V	L1
13	0V	R3	35	0V	L2
14	0V	R4	36	—	
15	0V	S5	37	—	
16	—	—	38	—	
17	—	—	39	—	
18	0V	S4	40	—	
19	11.9V	TAPE IN	41	0V	L3
20	0V	METAL	42	0V	L4
21	0V	R2	43	0V	L5
22	0V	S3	44	0V	L6

	B	C	E
	ON/OFF	ON/OFF	ON/OFF
Q101	4.9V/	1.5V/	1.5V/
Q102	5V/0V	0V/1.5V	0V
Q201	4.9V/	0V/6.6V	0V
Q202	7.5V	14.1V	0V
Q251	4.1V/0V	0V	0V
Q252	4V/	0V	0V
Q253	4.9V/	0V	0V
Q254	4.9V/	0V/5.2V	0V
Q331	1V/0V	0V	0V
Q332	4.1V/0V	0V	0V
Q333	4.1V/0V	0V	0V
Q351	8.9V/	0V	0V
Q352	8.9V/	0V	0V
Q401	11.9V/0V	0V/12.8V	0V
Q402	11.9V/0V	0V/12.8V	0V
Q601	0V/4.93V	7.6V/0V	0V
Q604	0V/14.1V	14.1V/0V	14.2V/14.1V
Q605	7.1V/0V	0V/14.1V	0V
Q802	5.6V	14.1V	5.1V
Q803	5.6V	14.1V	5V
Q805	13.5V/12.1V	14.2V/0V	14.2V/14.1V
Q806	4.9V/0V	0V/14.1V	0V
Q807	13.5V/14.2V	14.1V/0V	14.1V/14.2V
Q808	2.8V/0V	0V/14.2V	0V
Q809	14.1V/14.2V	0V	14.2V
Q810	0V	14.1V/14.2V	0V
Q812	14.1V/13.1V	12.1V/14V	14.1V
Q813	5.2V/0V	0V/7.3V	0V
Q814	12.1V	14.1V	12.1V
Q815	11.5V	12.1V	10.8V
Q816	0V	10.8V	0V
Q817	0V/7.3V	14.8V/0V	0V
Q820	0V/5.2V	5.2V/0V	5.2V
Q821	3.7V/0V	0V/5.2V	0V
Q822	3.6V/0V	0V/14.3V	0V

GR CONT P.C.Board
IC501

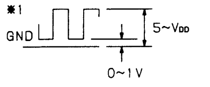
1	0V
2	0V
3	7V
4	0V
5	13.8V
6	0V
7	13.8V
8	5.1V
9	0.7V
10	0V

M501

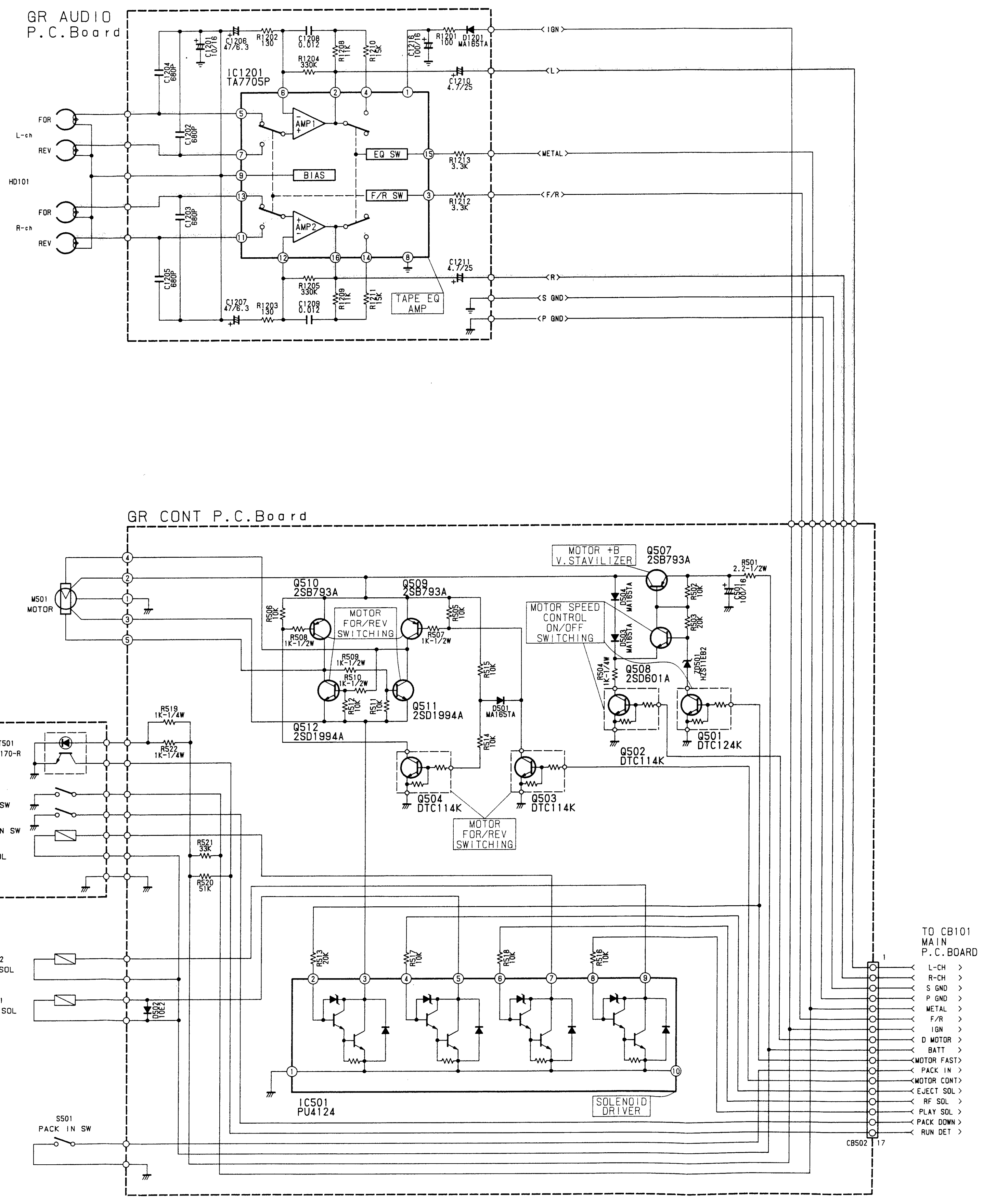
1	0V
2	13.5V
3	7V
4	13.5V
5	6.9V

CB502 (AT PLAY FOR)

1	0V
2	0V
3	0V
4	0V
5	13.8V
6	5.1V
7	14V
8	5.1V
9	14V
10	5.1V
11	5.1V
12	5.1V
13	0V
14	0V
15	5.1V
16	5.1V
17	✱1

✱1

GND
5~VDD
0~1V

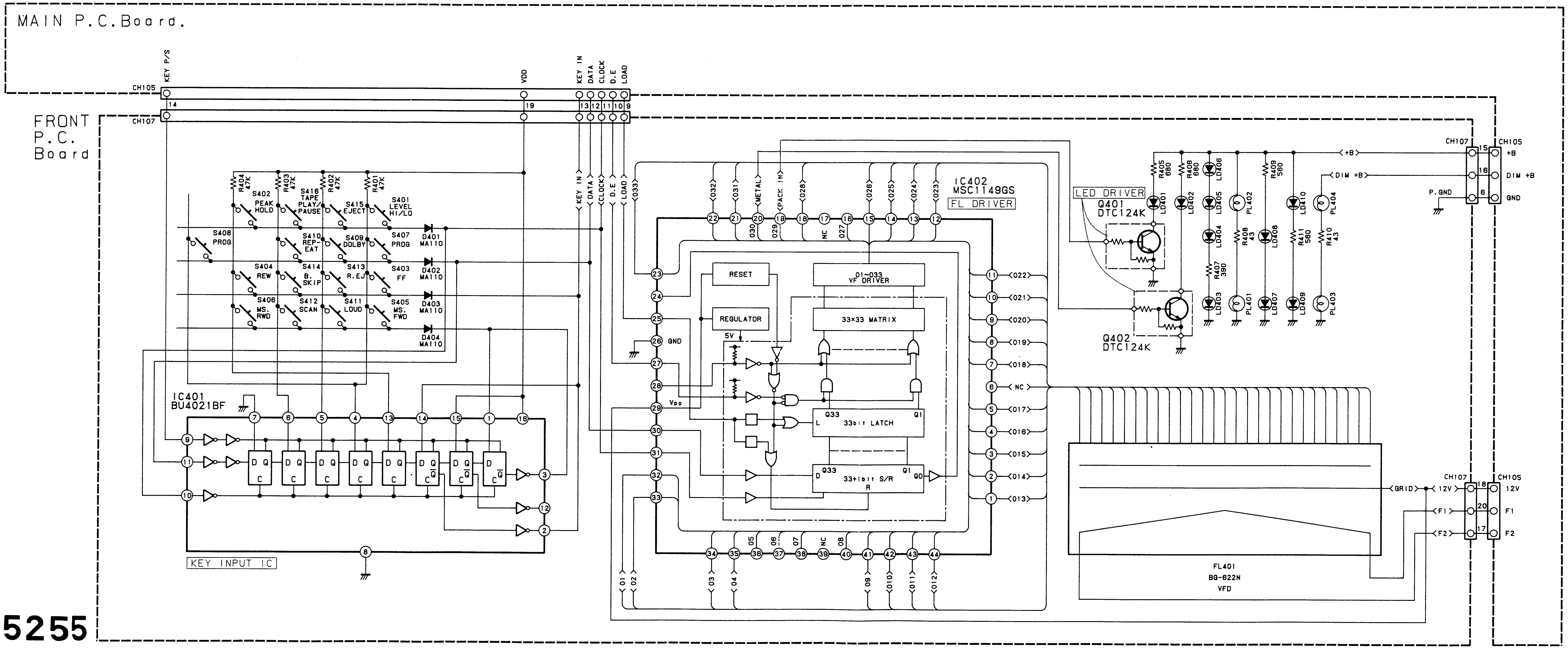
IC'S	IC1201 IC501
TRANSISTOR (Q)	Q510 Q512 Q509 Q511 Q504 Q503 Q502 Q507 Q508 Q501


GR AUDIO P.C.Board
IC1201 TA7705P
AMP1
AMP2
EQ SW
BIAS
F/R SW
TAPE EQ AMP
HD101
L-ch FOR REV
R-ch FOR REV
C1201 10/16
C1206 47/6.3
R1202 130
C1208 0.012
R1204 330K
R1208 11K
R1210 15K
C1216 100/16
R1201 100
D1201 MA165TA
C1210 4.7/25
R1213 3.3K
R1212 3.3K
C1211 4.7/25
C1204 680P
C1202 680P
C1203 680P
C1205 680P
C1207 47/6.3
R1203 130
C1209 0.012
R1205 330K
R1209 11K
R1211 15K
IGN
L
METAL
F/R
R
S GND
P GND
GR CONT P.C.Board
M501 MOTOR
MOTOR +B V.STAVILIZER
Q507 2SB793A
R501 2.2-1/2W
C501 100/16
Q510 2SB793A
Q509 2SB793A
MOTOR FOR/REV SWITCHING
MOTOR SPEED CONTROL ON/OFF SWITCHING
R506 10K
R508 1K-1/2W
R507 1K-1/2W
R505 10K
R509 1K-1/2W
R510 1K-1/2W
R512 10K
R511 10K
Q511 2SD1994A
Q512 2SD1994A
R515 10K
D501 MA165TA
D504 MA165TA
D503 MA165TA
R502 10K
R503 10K
R504 1K-1/4W
Q508 2SD601A
D502 HZS11EB2
Q502 DTC114K
Q501 DTC124K
R516 10K
Q504 DTC114K
Q503 DTC114K
MOTOR FOR/REV SWITCHING
PT501 ON2170-R
R519 1K-1/4W
R522 1K-1/4W
S503 METAL SW
S502 PACK DOWN SW
SD503 RF SOL
R521 33K
R520 51K
SD502 PLAY SOL
SD501 EJECT SOL
D502 1SS122
R513 20K
R517 10K
R518 10K
R514 10K
IC501 PU4124
SOLENOID DRIVER
S501 PACK IN SW
TO CB101 MAIN P.C.BOARD
L-CH
R-CH
S GND
P GND
METAL
F/R
IGN
D MOTOR
BATT
MOTOR FAST
PACK IN
MOTOR CONT
EJECT SOL
RF SOL
PLAY SOL
PACK DOWN
RUN DET
CB502
1
17

1

Schematic Diagram (2/3)

IC'S	IC401	IC402
TRANSISTORS (Q)		Q401 Q402



MAIN P.C.Board.
FRONT P.C. Board
CH105
CH107
KEY P/S
VDD
KEY IN
DATA
CLOCK
D.E
LOAD
14
19
13
12
11
10
9
R404 47K
R403 47K
R402 47K
R401 47K
S402 PEAK HOLD
S418 TAPE PLAY/PAUSE
S415 EJECT
S401 LEVEL HI/LO
S408 PROG
S410 REP-EAT
S409 DOLBY
S407 PROG
D401 MA110
S404 REW
S414 B. SKIP
S413 R.EJ
S403 FF
D402 MA110
S406 MS. RWD
S412 SCAN
S411 LOUD
S405 MS. FWD
D403 MA110
D404 MA110
IC401 BU4021BF
KEY INPUT IC
IC402 MSC1149GS
FL DRIVER
RESET
REGULATOR
5V
GND
VDD
O1~O33 VF DRIVER
33×33 MATRIX
33bit LATCH
33+1bit S/R
O32
O31
METAL
PACK IN
O28
O26
O25
O24
O23
O30
O29
NC
O27
O22
O21
O20
O19
O18
NC
O17
O16
O15
O14
O13
O33
O1
O2
O3
O4
O5
O6
O7
O8
O9
O10
O11
O12
LED DRIVER
Q401 DTC124K
Q402 DTC124K
R405 680
R406 680
R407 390
R408 43
R409 560
R410 43
R411 560
LD401
LD402
LD403
LD404
LD405
LD406
LD407
LD408
LD409
LD410
PL401
PL402
PL403
PL404
+B
DIM +B
P.GND
GND
12V
F1
F2
GRID
FL401
BG-622N
VFD

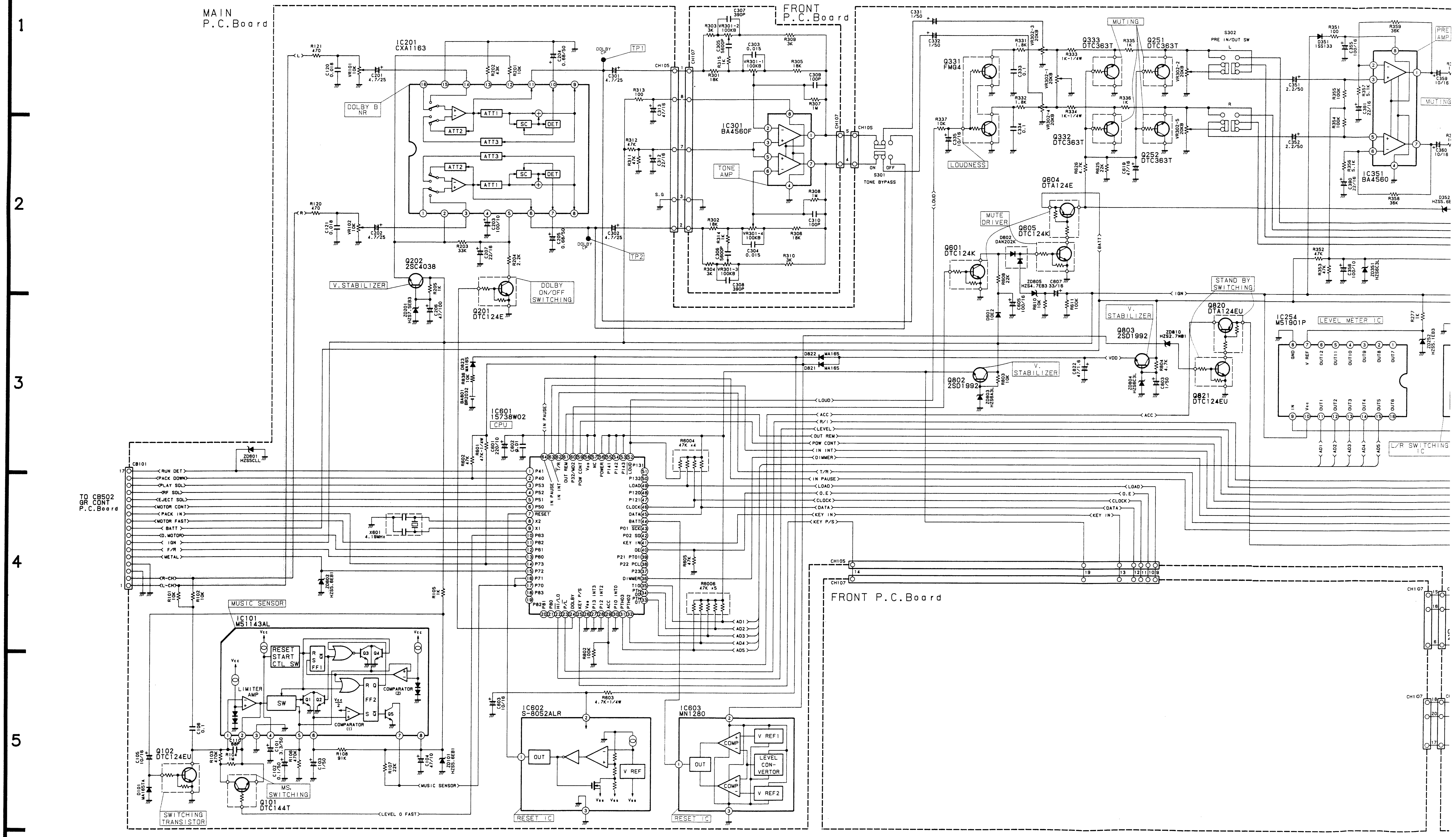
5255

A B C D E F G H

Schematic Diagram (3/3)

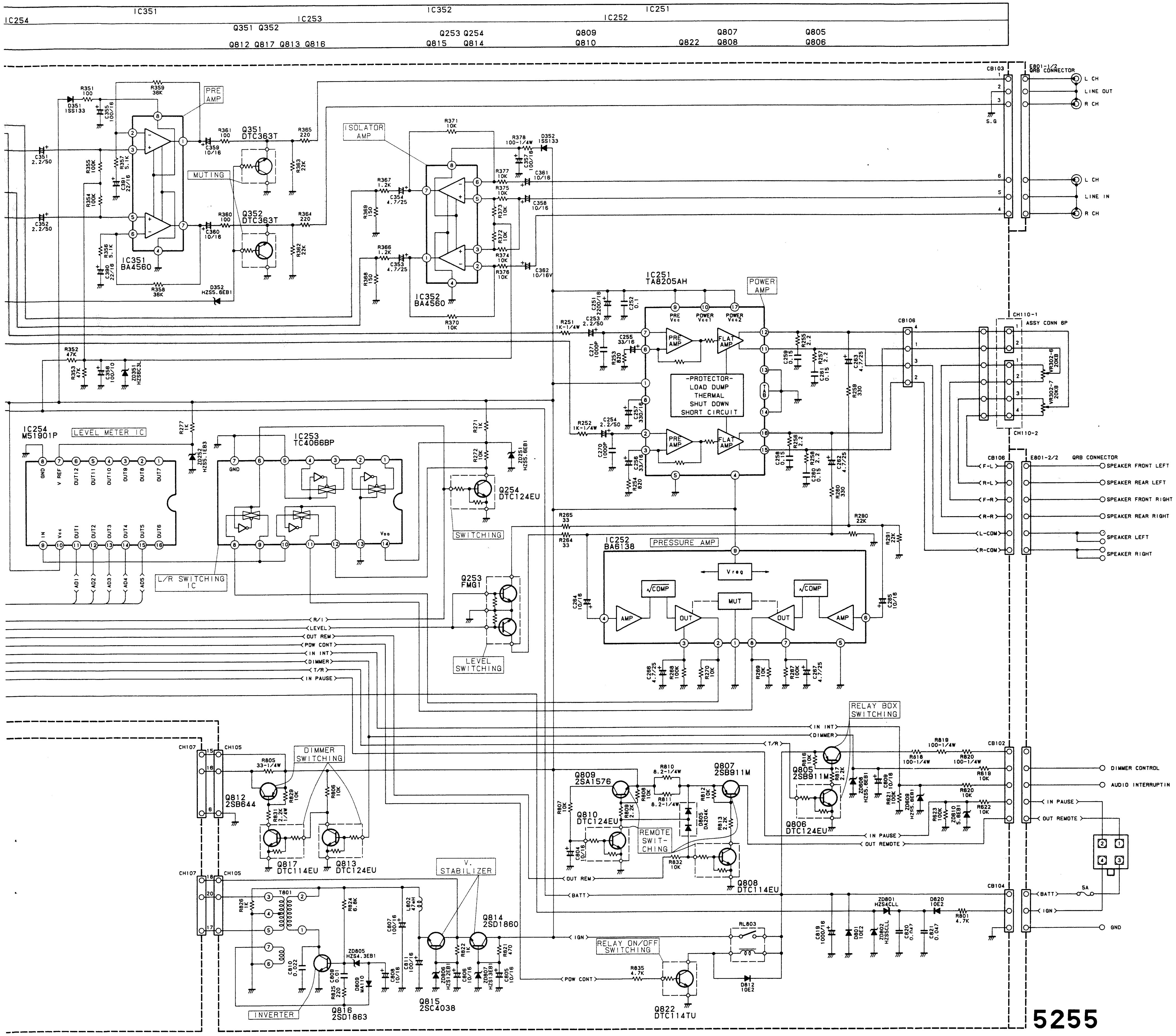
IC'S	IC101	IC201	IC601	IC602	IC603	IC301	IC254	IC351

TRANSISTORS (Q)	Q102	Q101	Q202	Q201	Q331 Q601 Q802	Q604 Q605	Q332	Q333	Q803	Q251 Q252	Q820 Q821



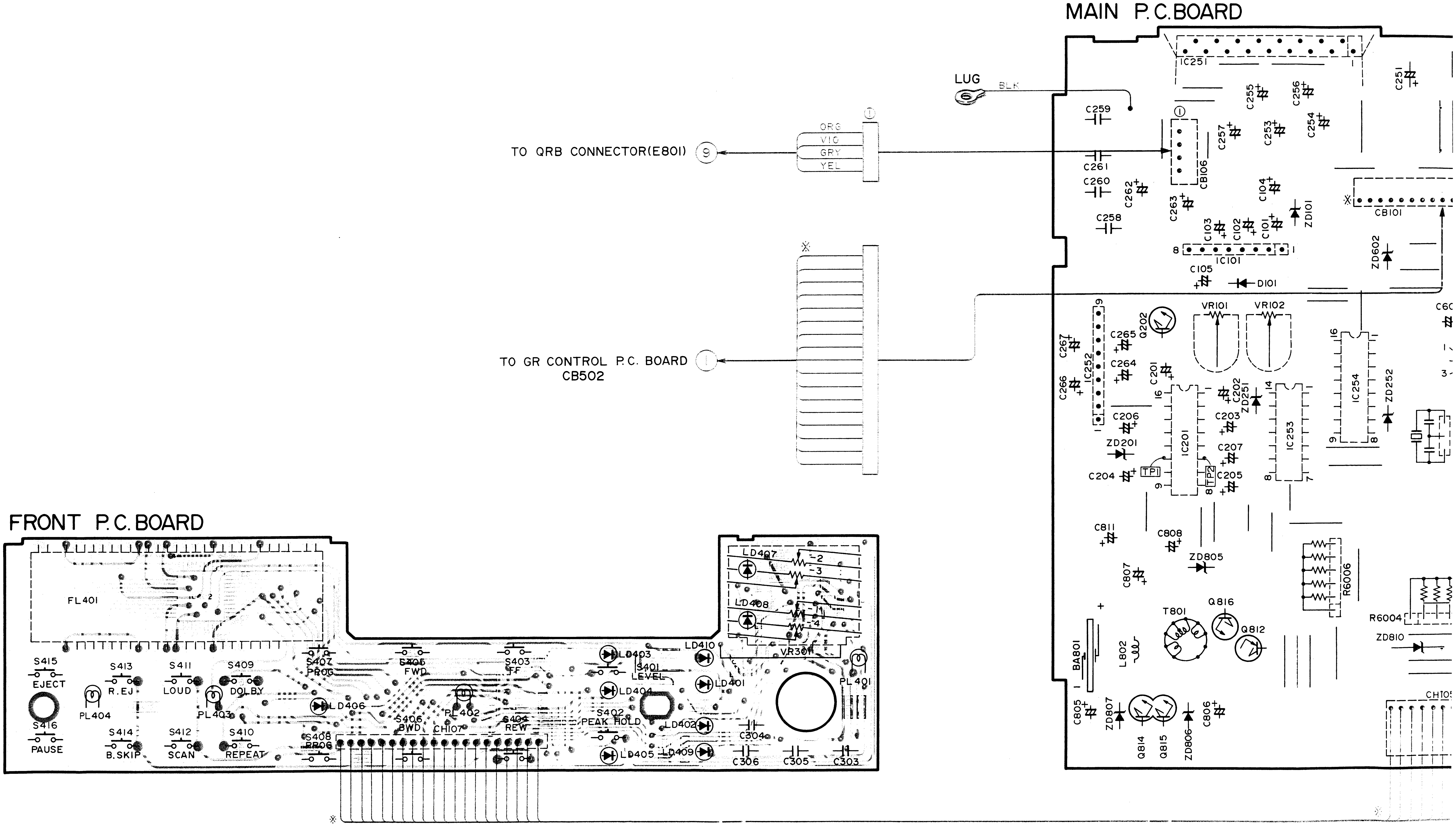
1
2
3
4
5
MAIN P.C.Board
FRONT P.C.Board
IC201 CXA1163
DOLBY B NR
ATT1
ATT2
ATT3
SC
DET
DOLBY ON/OFF SWITCHING
Q201 DTC124E
Q202 2SC4038
V.STABILIZER
ZD201 HZS7.5EB3
TP1
TP2
IC301 BA4560F
TONE AMP
S301 TONE BYPASS
ON
OFF
CH105
CH107
Q331 FMG4
LOUDNESS
MUTING
Q333 DTC363T
Q251 DTC363T
Q332 DTC363T
Q252 DTC363T
S302 PRE IN/OUT SW
IC351 BA4560
PRE AMP
Q604 DTA124E
MUTE DRIVER
Q605 DTC124K
Q601 DTC124K
D602 DAN202K
STAND BY SWITCHING
Q820 DTA124EU
Q821 DTC124EU
Q803 2SD1992
V. STABILIZER
Q802 2SD1992
IC254 M51801P
LEVEL METER IC
L/R SWITCHING IC
IC601 IS738W02
CPU
X601 4.19MHz
TO CB502 GR CONT P.C.Board
CB101
RUN DET
PACK DOWN
PLAY SOL
RF SOL
EJECT SOL
MOTOR CONT
PACK IN
MOTOR FAST
BATT
D.MOTOR
IGN
F/R
METAL
R-CH
L-CH
LOUD
ACC
LEVEL
OUT REM
POW CONT
IN INT
DIMMER
T/R
IN PAUSE
LOAD
D.E
CLOCK
DATA
KEY IN
KEY P/S
AD1
AD2
AD3
AD4
AD5
VDD
MUSIC SENSOR
IC101 M51143AL
RESET START CTL SW
LIMITER AMP
SW
FF1
FF2
COMPARATOR (1)
COMPARATOR (2)
Q102 DTC124EU
SWITCHING TRANSISTOR
Q101 DTC144T
MS. SWITCHING
LEVEL 0 FAST
IC602 S-8052ALR
OUT
V REF
RESET IC
IC603 MN1280
COMP
V REF1
V REF2
LEVEL CON-VERTOR
FRONT P.C.Board

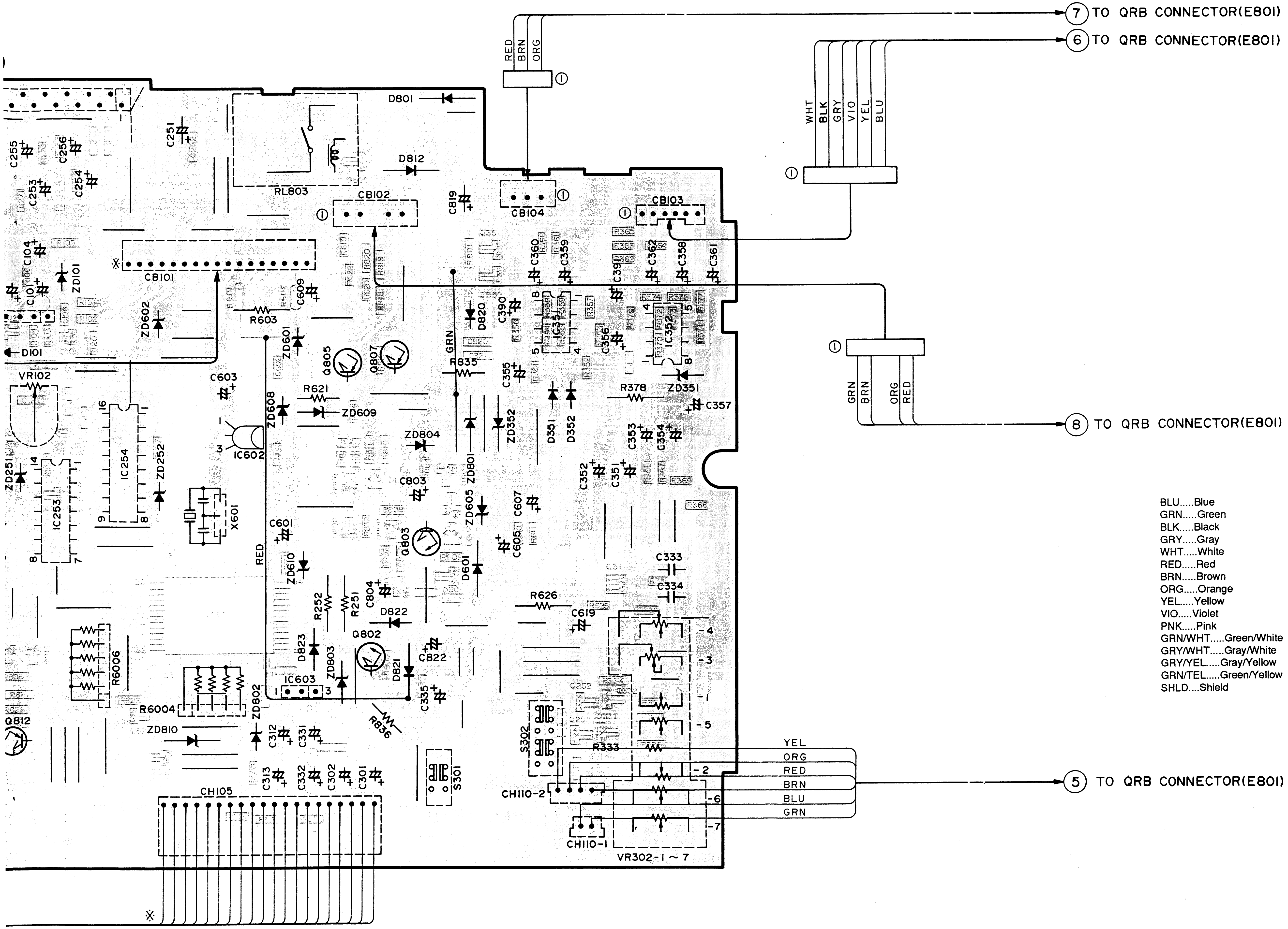
A B C D E F G H


IC254
IC351
IC253
IC352
IC252
IC251
Q351 Q352
Q812 Q817 Q813 Q816
Q253 Q254
Q815 Q814
Q809
Q810
Q822
Q807
Q808
Q805
Q806
PRE AMP
MUTING
IC351
BA4560
Q351
DTC363T
Q352
DTC363T
ISOLATOR AMP
IC352
BA4560
IC251
TA8205AH
POWER AMP
PRE Vcc
POWER Vcc1
POWER Vcc2
PRE AMP
FLAT AMP
-PROTECTOR-
LOAD DUMP
THERMAL
SHUT DOWN
SHORT CIRCUIT
IC254
M51801P
LEVEL METER IC
IC253
TC4066BP
L/R SWITCHING IC
Q254
DTC124EU
SWITCHING
Q253
FMG1
LEVEL SWITCHING
IC252
BA6138
PRESSURE AMP
Vreg
√COMP
AMP
OUT
MUT
CB103
E801-1/2
QRB CONNECTOR
L CH
LINE OUT
R CH
L CH
LINE IN
R CH
S.G
CB106
CH110-1
ASSY CONN 6P
CH110-2
VR302-6
VR302-7
E801-2/2
QRB CONNECTOR
SPEAKER FRONT LEFT
SPEAKER REAR LEFT
SPEAKER FRONT RIGHT
SPEAKER REAR RIGHT
SPEAKER LEFT
SPEAKER RIGHT
F-L
R-L
F-R
R-R
L-COM
R-COM
R/I
LEVEL
OUT REM
POW CONT
IN INT
DIMMER
T/R
IN PAUSE
AD1
AD2
AD3
AD4
AD5
RELAY BOX SWITCHING
CH107
CH105
DIMMER SWITCHING
Q812
2SB644
Q817
DTC114EU
Q813
DTC124EU
Q809
2SA1576
Q810
DTC124EU
REMOTE SWIT-CHING
Q807
2SB911M
Q808
DTC114EU
Q805
2SB911M
Q806
DTC124EU
CB102
DIMMER CONTROL
AUDIO INTERRUPTIN
IN PAUSE
OUT REMOTE
OUT REM
BATT
IGN
GND
5A
CB104
V. STABILIZER
T801
INVERTER
Q816
2SD1863
Q815
2SC4038
Q814
2SD1860
RELAY ON/OFF SWITCHING
RL803
Q822
DTC114TU
POW CONT
ZD801
HZS4CLL
D820
10E2
R801
4.7K
5255

H I J K L M N O

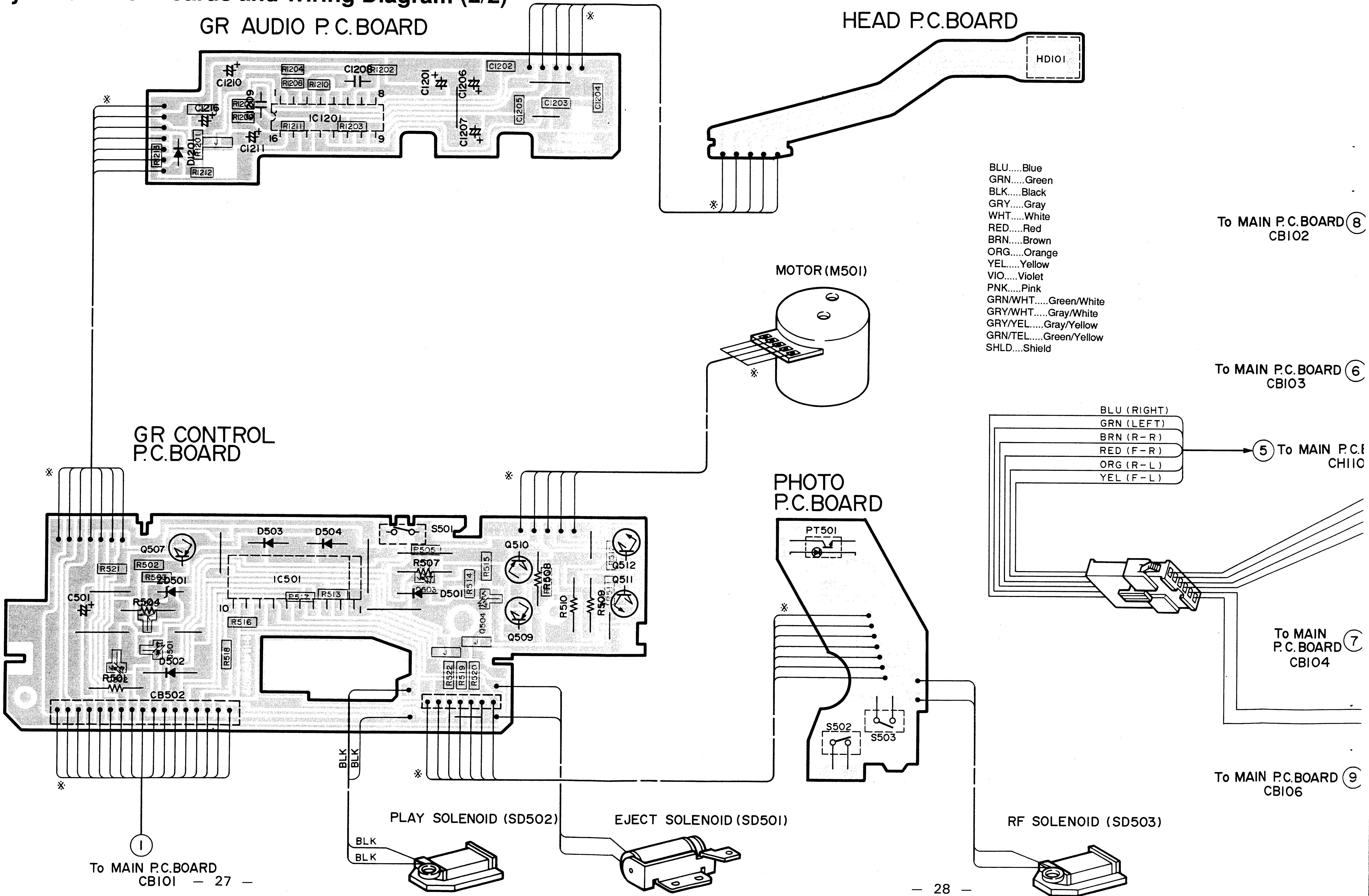
Parts Layout on P. C. Boards and Wiring Diagram (1/2)


MAIN P.C.BOARD
LUG
BLK
TO QRB CONNECTOR(E801)
⑨
①
ORG
VIO
GRY
YEL
TO GR CONTROL P.C. BOARD
CB502
①
※
FRONT P.C.BOARD
IC251
C251
C255
C256
C259
C257
C253
C254
C261
CB106
C260
C262
C263
C104
C103
C102
C101
ZD101
CB101
C258
IC101
ZD602
C105
D101
VR101
VR102
C60
Q202
C265
C267
C264
IC252
C201
C266
C202
ZD251
IC254
ZD252
C206
C203
IC201
IC253
ZD201
C207
C204
TP1
TP2
C205
C811
C808
ZD805
R6006
C807
Q816
T801
Q812
R6004
ZD810
BA801
L802
C805
ZD807
C806
Q814
Q815
ZD806
CH105
FL401
LD407
LD408
VR301
S415
EJECT
S413
R.EJ
S411
LOUD
S409
DOLBY
S407
PROG
S405
FWD
S403
FF
LD403
S401
LEVEL
LD410
LD401
PL401
PL404
PL403
LD406
S406
BWD
PL402
S404
REW
LD404
S402
PEAK HOLD
LD402
S416
PAUSE
S414
B.SKIP
S412
SCAN
S410
REPEAT
S408
PROG
CH107
LD405
LD409
C304
C306
C305
C303
※

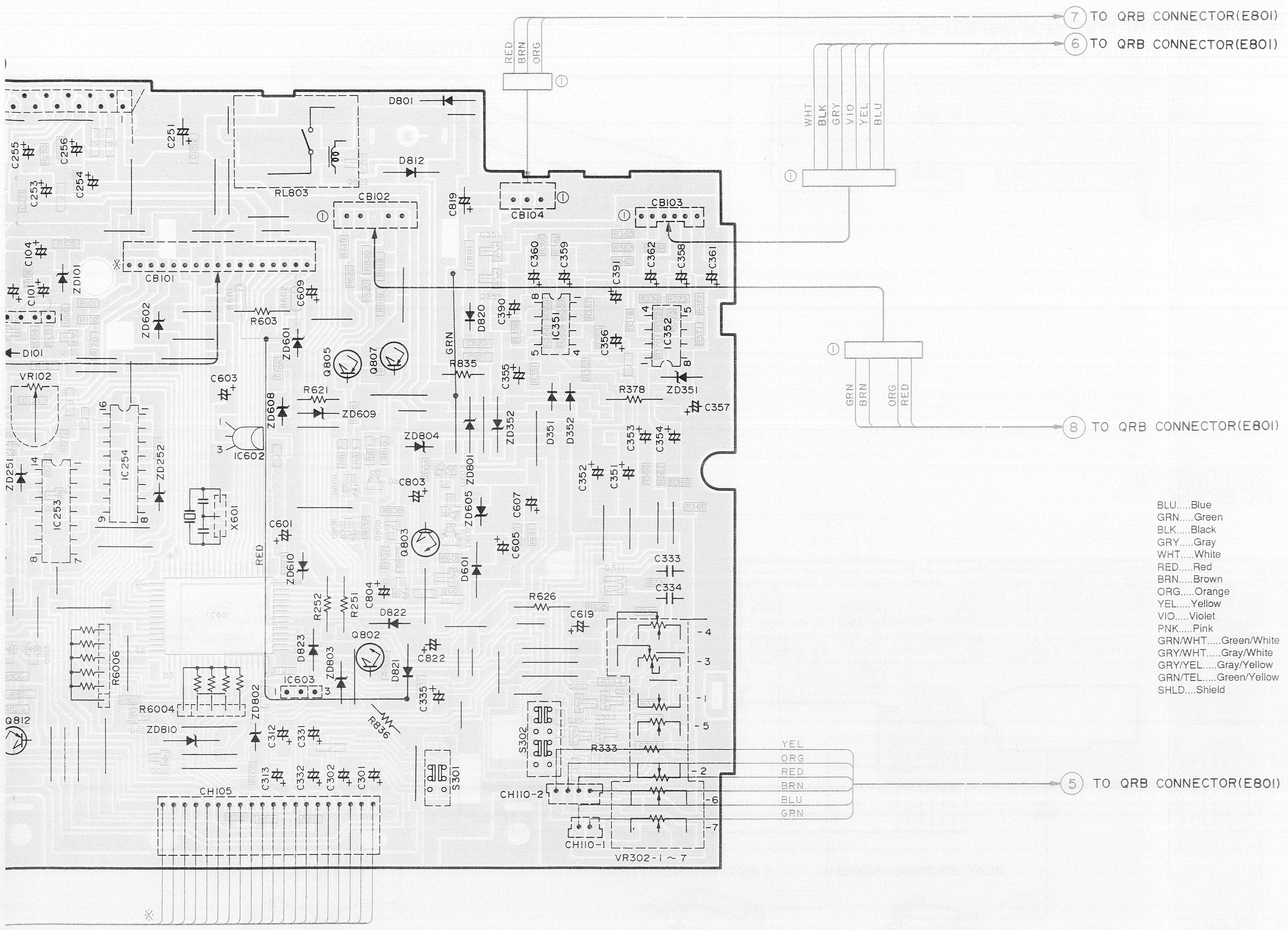

⑦ TO QRB CONNECTOR(E801)
⑥ TO QRB CONNECTOR(E801)
⑧ TO QRB CONNECTOR(E801)
⑤ TO QRB CONNECTOR(E801)
RED
BRN
ORG
WHT
BLK
GRY
VIO
YEL
BLU
GRN
D801
D812
RL803
CB101
CB102
CB103
CB104
C251
C255
C256
C253
C254
C104
C101
ZD101
D101
VR102
ZD602
R603
ZD601
C609
C603
R621
ZD608
ZD609
IC602
Q805
Q807
R835
C819
D820
C390
C360
C359
C391
C362
C358
C361
IC351
IC352
C355
C356
D351
D352
R378
ZD351
C357
C353
C354
C352
C351
ZD804
ZD801
ZD352
C803
ZD605
C607
C605
Q803
D601
C601
ZD610
IC254
IC253
ZD252
ZD251
X601
R252
R251
C804
D822
Q802
D823
ZD803
D821
C822
C335
R836
IC603
ZD802
R6006
R6004
ZD810
Q812
C312
C331
C313
C332
C302
C301
CH105
S301
S302
R626
C619
C333
C334
R333
CH110-2
CH110-1
VR302-1 ~ 7
-1
-2
-3
-4
-5
-6
-7
ⓘ
※

BLU.....Blue
GRN.....Green
BLK.....Black
GRY.....Gray
WHT.....White
RED.....Red
BRN.....Brown
ORG.....Orange
YEL.....Yellow
VIO.....Violet
PNK.....Pink
GRN/WHT.....Green/White
GRY/WHT.....Gray/White
GRY/YEL.....Gray/Yellow
GRN/TEL.....Green/Yellow
SHLD....Shield

Parts Layout on P. C. Boards and Wiring Diagram (2/2)

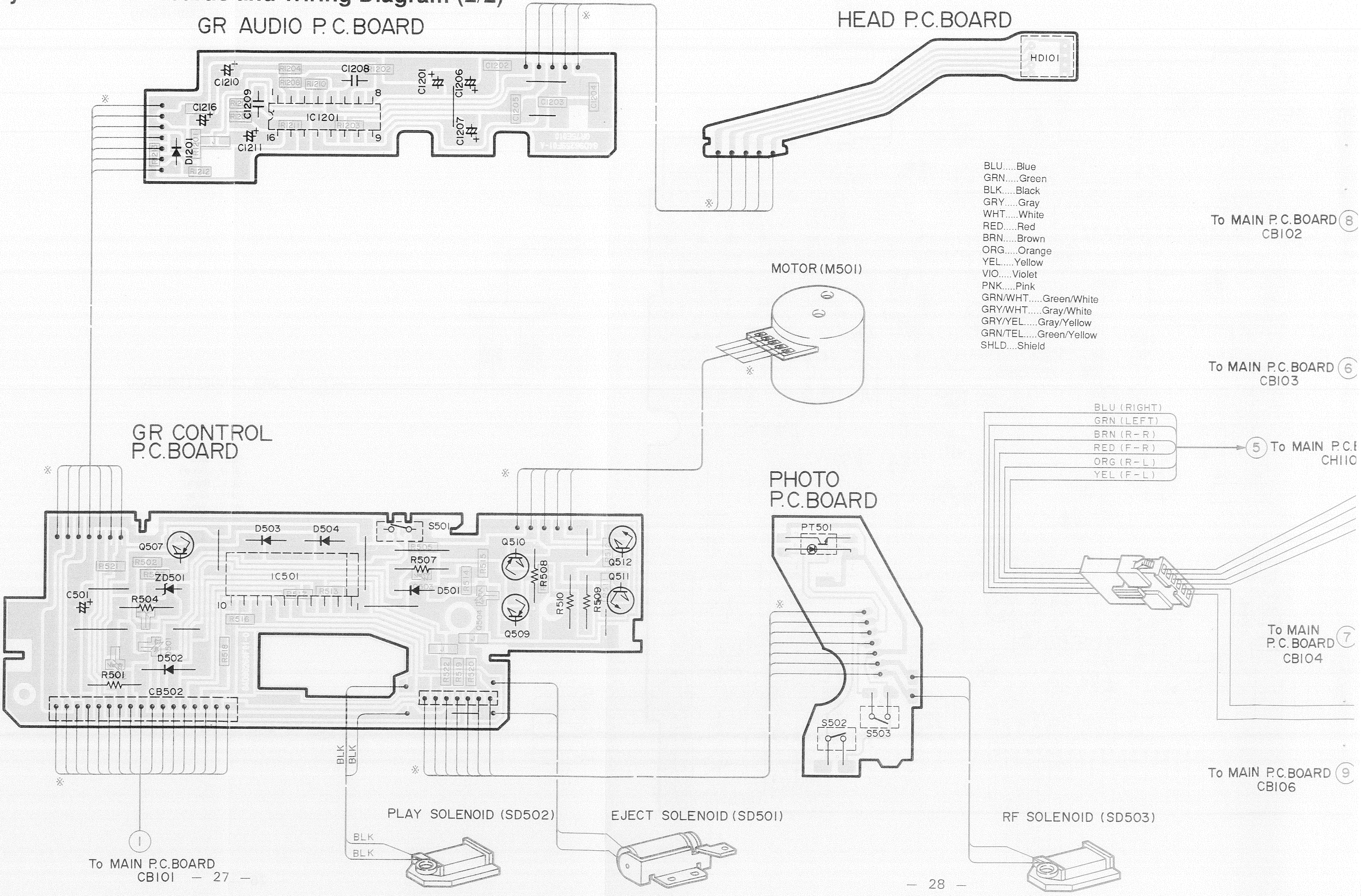

GR AUDIO P. C. BOARD
HEAD P.C.BOARD
HD101
C1210
R1204
R1208
R1210
C1208
R1202
C1201
C1206
C1202
C1216
R1209
IC1201
R1211
R1203
C1203
C1205
C1204
C1207
C1211
D1201
R1201
R1213
R1212
C1209
J
1
8
16
9
※
MOTOR (M501)
To MAIN P.C.BOARD ⑧ CB102
To MAIN P.C.BOARD ⑥ CB103
BLU (RIGHT)
GRN (LEFT)
BRN (R-R)
RED (F-R)
ORG (R-L)
YEL (F-L)
⑤ To MAIN P.C.
CH110
GR CONTROL P.C.BOARD
PHOTO P.C.BOARD
PT501
D503
D504
S501
Q507
R521
R502
R503
D501
IC501
R505
R507
R503
D501
R514
R515
Q510
R508
R512
Q512
Q511
C501
R504
10
R5?7
R513
R510
R509
R511
Q504
Q509
R516
R518
D502
R502
R522
R519
R520
CB502
J
S502
S503
To MAIN P.C.BOARD ⑦ CB104
To MAIN P.C.BOARD ⑨ CB106
BLK
BLK
PLAY SOLENOID (SD502)
EJECT SOLENOID (SD501)
RF SOLENOID (SD503)
BLK
BLK
①
To MAIN P.C.BOARD CB101

BLU.....Blue
GRN.....Green
BLK.....Black
GRY.....Gray
WHT.....White
RED.....Red
BRN.....Brown
ORG.....Orange
YEL.....Yellow
VIO.....Violet
PNK.....Pink
GRN/WHT.....Green/White
GRY/WHT.....Gray/White
GRY/YEL.....Gray/Yellow
GRN/TEL.....Green/Yellow
SHLD....Shield

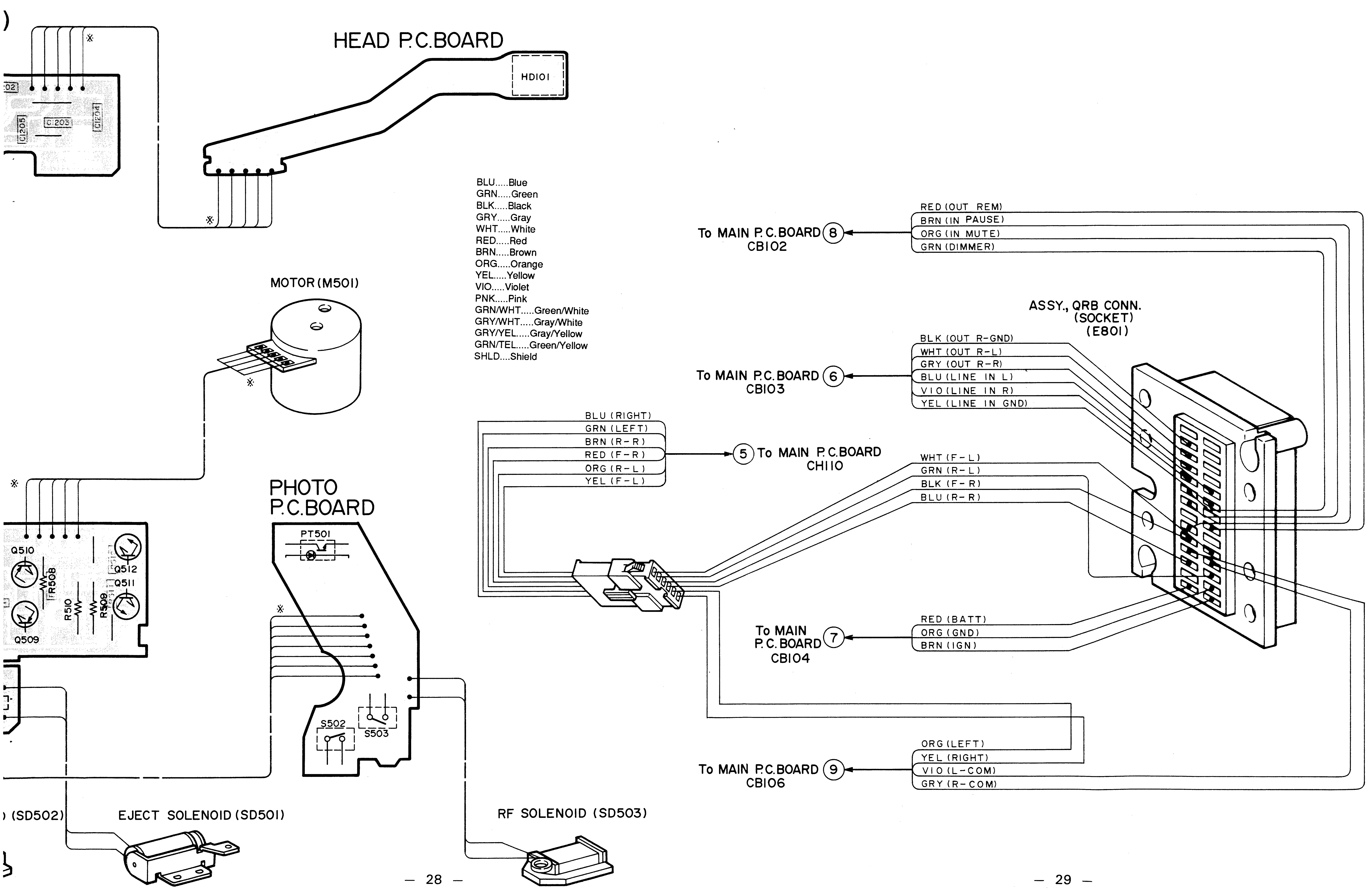

⑦ TO QRB CONNECTOR(E801)
⑥ TO QRB CONNECTOR(E801)
⑧ TO QRB CONNECTOR(E801)
⑤ TO QRB CONNECTOR(E801)
RED
BRN
ORG
WHT
BLK
GRY
VIO
YEL
BLU
GRN
BRN
ORG
RED
YEL
ORG
RED
BRN
BLU
GRN
D801
D812
RL803
CB102
CB104
CB103
CB101
C251
C255
C256
C253
C254
C104
C101
ZD101
D101
VR102
ZD602
R603
ZD601
C609
Q805
Q807
GRN
R835
C819
D820
C390
IC351
C360
C359
C391
C362
C358
C361
IC352
C356
ZD351
C357
R378
C355
D351
D352
ZD352
C353
C354
C352
C351
C603
R621
ZD609
ZD608
IC602
IC254
ZD252
ZD251
IC253
X601
ZD804
ZD801
C803
ZD605
C607
C605
C601
Q803
D601
ZD610
RED
R252
R251
C804
D822
R626
C619
C333
C334
Q802
D823
ZD803
D821
C822
C335
R6006
R6004
IC603
ZD802
ZD810
Q812
R836
C312
C331
C313
C332
C302
C301
CH105
S301
S302
R333
CH110-2
CH110-1
VR302-1 ~ 7
-4
-3
-1
-5
-2
-6
-7
①
※

BLU.....Blue
GRN.....Green
BLK.....Black
GRY.....Gray
WHT.....White
RED.....Red
BRN.....Brown
ORG.....Orange
YEL.....Yellow
VIO.....Violet
PNK.....Pink
GRN/WHT.....Green/White
GRY/WHT.....Gray/White
GRY/YEL.....Gray/Yellow
GRN/TEL.....Green/Yellow
SHLD....Shield

Parts Layout on P. C. Boards and Wiring Diagram (2/2)


GR AUDIO P.C.BOARD
C1210
C1208
R1204
R1202
R1208
R1210
C1201
C1206
C1202
C1216
C1209
IC1201
8
16
9
C1211
D1201
R1201
R1211
R1203
C1207
C1205
C1203
C1204
R1212
HEAD P.C.BOARD
HD101
MOTOR (M501)
GR CONTROL
P.C.BOARD
Q507
D503
D504
S501
Q510
Q512
R521
R502
ZD501
IC501
R507
R505
R508
Q511
C501
R504
10
R513
R512
D501
R510
R509
R516
Q509
R518
D502
R501
CB502
R522
R519
R520
BLK
BLK
PHOTO
P.C.BOARD
PT501
S502
S503
BLU (RIGHT)
GRN (LEFT)
BRN (R-R)
RED (F-R)
ORG (R-L)
YEL (F-L)
To MAIN P.C.BOARD ⑧
CB102
To MAIN P.C.BOARD ⑥
CB103
⑤ To MAIN P.C.
CH110
To MAIN
P.C.BOARD ⑦
CB104
To MAIN P.C.BOARD ⑨
CB106
PLAY SOLENOID (SD502)
EJECT SOLENOID (SD501)
RF SOLENOID (SD503)
BLK
BLK
①
To MAIN P.C.BOARD
CB101

BLU.....Blue
GRN.....Green
BLK.....Black
GRY.....Gray
WHT.....White
RED.....Red
BRN.....Brown
ORG.....Orange
YEL.....Yellow
VIO.....Violet
PNK.....Pink
GRN/WHT.....Green/White
GRY/WHT.....Gray/White
GRY/YEL.....Gray/Yellow
GRN/TEL.....Green/Yellow
SHLD....Shield


HEAD P.C.BOARD
HD101
C1202
C1205
C1203
C1204
※
MOTOR (M501)
PHOTO P.C.BOARD
PT501
S502
S503
Q510
Q509
Q512
Q511
R508
R510
R509
(SD502)
EJECT SOLENOID (SD501)
RF SOLENOID (SD503)
BLU (RIGHT)
GRN (LEFT)
BRN (R-R)
RED (F-R)
ORG (R-L)
YEL (F-L)
5 To MAIN P.C.BOARD CH110
To MAIN P.C.BOARD 8 CB102
RED (OUT REM)
BRN (IN PAUSE)
ORG (IN MUTE)
GRN (DIMMER)
To MAIN P.C.BOARD 6 CB103
BLK (OUT R-GND)
WHT (OUT R-L)
GRY (OUT R-R)
BLU (LINE IN L)
VIO (LINE IN R)
YEL (LINE IN GND)
ASSY., QRB CONN. (SOCKET) (E801)
WHT (F-L)
GRN (R-L)
BLK (F-R)
BLU (R-R)
To MAIN P.C.BOARD 7 CB104
RED (BATT)
ORG (GND)
BRN (IGN)
To MAIN P.C.BOARD 9 CB106
ORG (LEFT)
YEL (RIGHT)
VIO (L-COM)
GRY (R-COM)

BLU.....Blue
GRN.....Green
BLK.....Black
GRY.....Gray
WHT.....White
RED.....Red
BRN.....Brown
ORG.....Orange
YEL.....Yellow
VIO.....Violet
PNK.....Pink
GRN/WHT.....Green/White
GRY/WHT.....Gray/White
GRY/YEL.....Gray/Yellow
GRN/TEL.....Green/Yellow
SHLD....Shield

Electrical Parts List

Resistor:Carbon resistors under 1/8 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor: μF-microfarads, pF-picofarads

Abbreviations

CAP.-Capacitor
CP.-Chip
LED.-Light Emitting Diode
MO.-Metal Oxide Film
PP.-Polypropylene
TAN.-Tantalum
CER.-Ceramic
ELY.-Electrolytic
MIC.-Mica
MYL.-Mylar
SOL.-Solid
ZEN.-Zener

Symbol No.	Part No.	Description		
Main P.C. Board				
IC's				
IC101	51T67915F01	M51143AL		
IC201	51T84635F01	CXA1163		
IC251	51T15100W01	TA8205AH		
IC252	51T15738W02	15738W02		
IC253	51T47739F01	TC4066BP		
IC254	51T52393F01	M51901		
IC351	51T15001W01	BA4560		
IC352	51T15001W01	BA4560		
IC601	51T15738W02	15738W02		
IC602	51T92166F01	S-8052ALR		
IC603	51T72309F01	MN1280		
Transistors				
Q101	48T94606F12	CP., DTC144TU		
Q102	48T94606F03	CP., DTC124EU		
Q201	48T94606F03	CP., DTC124EU		
Q202	48T82758F05	2SC4038		
Q251	48T62967F34	CP., DTC363T		
Q252	48T62967F34	CP., DTC363T		
Q253	48T73888F08	CP., FMG1		
Q254	48T94606F03	CP., DTC124EU		
Q331	48T73888F10	CP., FMG4		
Q332	48T62967F34	CP., DTC363T		
Q333	48T62967F34	CP., DTC363T		
Q351	48T62967F34	CP., DTC363T		
Q352	48T62967F34	CP., DTC363T		
Q601	48T62967F03	CP., DTC124K		
Q604	48T62966F03	CP., DTA124E		
Q605	48T62967F03	CP., DTC124K		
Q802	48T90180F01	2SD1992		
Q803	48T90180F01	2SD1992		
Q805	48T70213F01	2SB911M		
Q806	48T94606F03	CP., DTC124EU		

Symbol No.	Part No.	Description		
Q807	48T70213F01	2SB911M		
Q808	48T94606F06	CP., DTC114EU		
Q809	48T94581F01	CP., 2SA1576		
Q810	48T94606F03	CP., DTC124EU		
Q812	48T47866F02	2SB644		
Q813	48T94606F03	CP., DTC124EU		
Q814	48T83414F04	2SD1860		
Q815	48T82758F05	2SC4038		
Q816	48T83617F03	2SD1863		
Q817	48T94606F06	CP., DTC114EU		
Q820	48T94606F53	CP., DTA124EU		
Q821	48T94606F03	CP., DTC124EU		
Q822	48T94606F05	CP., DTC114TU		
Diodes				
D101	48T44813F01	MA165TA		
D351	48T68828F01	1SS133		
D352	48T68828F01	1SS133		
D601	48C40235G02	10E2		
D602	48T63462F01	CP., DAN202K		
D801	48C40235G02	10E2		
D805	48T64134F01	CP., DA204K		
D809	48T90681F01	CP., MA110		
D812	48C40235G02	10E2		
D820	48S40235G02	10E2		
D821	48T44813F01	MA165TA		
D822	48T44813F01	MA165TA		
D823	48T44813F01	MA165TA		
ZD101	48T68697F20	ZEN., HZS5.6EB1		
ZD201	48T68697F31	ZEN., HZS7.5EB3		
ZD251	48T68697F20	ZEN., HZS5.6EB1		
ZD252	48T68697F19	ZEN., HZS5.1EB3		
ZD351	48T83128F09	ZEN., HZS6C3L		
ZD352	48T68697F20	ZEN., HZS5.6EB1		
ZD601	48T91071F12	ZEN., HZS5CLL		
ZD602	48T68697F20	ZEN., HZS5.6EB1		
ZD605	48T68697F16	ZEN., HZS4.7EB3		
ZD608	48T68697F20	ZEN., HZS5.6EB1		
ZD609	48T68697F20	ZEN., HZS5.6EB1		
ZD610	48T68697F20	ZEN., HZS5.6EB1		
ZD801	48T91071F09	ZEN., HZS4CLL		
ZD802	48T91071F12	ZEN., HZS5CLL		
ZD803	48T83128F03	ZEN., HZS6A3L		
ZD804	48T83128F09	ZEN., HZS6C3L		
ZD805	48T68697F11	ZEN., HZS4.3EB1		

Symbol No.	Part No.	Description		
ZD806	48T68697F45	ZEN., HZS12EB1		
ZD807	48T68697F48	ZEN., HZS13EB1		
ZD810	48T90517F07	ZEN., HZS2.7NB1		
Switches				
S301	40T68063F01	SSJ-322A TONE BYPASS (ON/OFF)		
S302	40T68057F01	SSJ-342(PRE ON/OFF)		
Coils/Relay				
L802	24T70709F01	COIL, 47mH		
T801	25T15705W01	COIL, DC-AC CONV		
RL803	80T93030F01	RELAY, MR331		
Crystal				
X601	91T15285W01	Ceramic LOCK, 4.19MHz		
Capacitors				
C101	23S61523F31	ELY.. 3.3μF/50V		
C102	23S61523F25	ELY.. 0.1μF/50V		
C103	23S61523F29	ELY.. 1μF/50V		
C104	23S61523F11	ELY.. 47μF/10V		
C105	23S61523F12	ELY.. 10μF/16V		
C106	08S65128F76	CP.. 0.1μF		
C110	08S65480F33	CER.. 68pF		
C120	08S53332F50	CP.. 0.018μF		
C121	08S53332F50	CP.. 0.018μF		
C201	23S61523F17	ELY.. 4.7μF/25V		
C202	23S61523F17	ELY.. 4.7μF/25V		
C203	23S61523F34	ELY.. 100μF/10V		
C204	23S61523F35	ELY.. 0.68μF/50V		
C205	23S61523F35	ELY.. 0.68μF/50V		
C206	23S61523F11	ELY.. 47μF/10V		
C207	23S61523F13	ELY.. 22μF/16V		
C251	23T83923F16	ELY.. 2200μF/16V		
C252	08S53332F57	CP.. 0.1μF		
C253	23S61523F30	ELY.. 2.2μF/50V		
C254	23S61523F30	ELY.. 2.2μF/50V		
C255	23S61523F14	ELY.. 33μF/16V		
C256	23S61523F14	ELY.. 33μF/16V		
C257	23C42170G35	ELY.. 330μF/16V		
C258	08T90316F31	TF. 0.15μF		
C259	08T90316F31	TF. 0.15μF		
C260	08T90316F31	TF. 0.15μF		
C261	08T90316F31	TF. 0.15μF		
C262	23S61523F17	ELY.. 4.7μF/25V		
C263	23S61523F17	ELY.. 4.7μF/25V		
C264	23S61523F12	ELY.. 10μF/16V		
C265	23S61523F12	ELY.. 10μF/16V		
C266	23S61523F17	ELY.. 4.7μF/25V		
C267	23S61523F17	ELY.. 4.7μF/25V		
C270	08S65128F57	CP.. 1000pF		
C271	08S65128F57	CP.. 1000pF		
C301	23S61523F17	ELY.. 4.7μF/25V		
C302	23S61523F17	ELY.. 4.7μF/25V		
C312	23S61523F13	ELY.. 22μF/16V		
C313	23S61523F15	ELY.. 47μF/16V		
C331	23S61523F29	ELY.. 1μF/50V		
C332	23S61523F29	ELY.. 1μF/50V		
C333	08T90316F29	TF.. 0.1μF		
C334	08T90316F29	TF.. 0.1μF		
C335	23S61523F12	ELY.. 10μF/16V		
C351	23S61523F30	ELY.. 2.2μF/50V		
C352	23S61523F30	ELY.. 2.2μF/50V		
C353	23S61523F17	ELY.. 4.7μF/25V		
C354	23S61523F17	ELY.. 4.7μF/25V		
C355	23S92017F03	ELY.. 100μF/16V		
C356	23S61523F34	ELY.. 100μF/10V		
C357	23S92017F03	ELY.. 100μF/16V		
C358	23S61523F12	ELY.. 10μF/16V		
C359	23S61523F12	ELY.. 10μF/16V		
C360	23S61523F12	ELY.. 10μF/16V		
C361	23S61523F12	ELY.. 10μF/16V		
C362	23S61523F12	ELY.. 10μF/16V		
C390	23S61523F13	ELY.. 22μF/16V		
C391	23S61523F13	ELY.. 22μF/16V		
C601	23S92017F01	ELY.. 220μF/10V		
C602	08S65128F69	CP.. 0.01μF		
C603	23S61523F12	ELY.. 10μF/16V		
C605	23S92017F03	ELY.. 100μF/16V		
C607	23S61523F14	ELY.. 33μF/16V		
C609	23S61523F12	ELY.. 10μF/16V		
C619	23S61523F15	ELY.. 47μF/16V		

Symbol No.	Part No.	Description		
C803	23S61523F29	ELY.. 1μF/50V		
C804	23S61523F12	ELY.. 10μF/16V		
C805	23S61523F12	ELY.. 10μF/16V		
C806	23S61523F12	ELY.. 10μF/16V		
C807	23S82482F02	ELY.. 100μF/16V		
C808	23S61523F12	ELY.. 10μF/16V		
C809	08S53332F47	CP.. 0.01μF		
C810	08S53332F51	CP.. 0.022μF		
C811	23S82482F02	ELY.. 100μF/16V		
C819	23T51232F02	ELY.. 1000μF/16V		
C820	08S60102F28	CP.. 0.047μF		
C821	08S60102F28	CP.. 0.047μF		
C822	23S57422F15	ELY.. 47μF/16V		
Resistors	(ALL resistors are chip 1/16W±5% unless otherwise noted.)			
R101	06S64995F77	10K ohm		
R102	06S64995F77	10K ohm		
R103	06S64996F18	470K ohm		
R104	06S64996F26	1M ohm		
R105	06S53330F53	1K ohm 1/8W		
R106	06S64996F18	470K ohm		
R107	06S64995F85	22K ohm		
R108	06S64996F01	91K ohm		
R120	06S53330F45	470 ohm 1/8W		
R121	06S53330F45	470 ohm 1/8W		
R201	06S64995F77	10K ohm		
R202	06S64995F92	43K ohm		
R203	06S64995F89	33K ohm		
R204	06S64995F61	2.2K ohm		
R205	06S53330F53	1K ohm 1/8W		
R253	06S64995F51	820 ohm		
R254	06S64995F51	820 ohm		
R255	06S53331F40	2.2 ohm 1/8W		
R256	06S53331F40	2.2 ohm 1/8W		
R257	06S53331F40	2.2 ohm 1/8W		
R258	06S53331F40	2.2 ohm 1/8W		
R259	06S64995F41	330 ohm		
R260	06S64995F41	330 ohm		
R264	06S53330F17	33 ohm 1/8W		
R265	06S53330F17	33 ohm 1/8W		
R267	06S64996F02	100K ohm		
R268	06S64996F02	100K ohm		
R269	06S64995F77	10K ohm		
R270	06S64995F77	10K ohm		
R271	06S64995F53	1K ohm		

Symbol No.	Part No.	Description		
R272	06S64995F77	10K ohm		
R277	06S64995F53	1K ohm		
R290	06S53330F85	22K ohm 1/8W		
R291	06S53330F85	22K ohm 1/8W		
R311	06S64995F93	47K ohm		
R312	06S64995F93	47K ohm		
R313	06S64995F29	100 ohm		
R331	06S64995F59	1.8K ohm		
R332	06S64995F59	1.8K ohm		
R334	06S53330F53	1K ohm 1/8W		
R335	06S53330F53	1K ohm 1/8W		
R336	06S53330F53	1K ohm 1/8W		
R337	06S64995F77	10K ohm		
R351	06S64995F29	100 ohm		
R352	06S64995F93	47K ohm		
R353	06S64995F93	47K ohm		
R354	06S64996F02	100K ohm		
R355	06S64996F02	100K ohm		
R356	06S64995F70	5.1K ohm		
R357	06S64995F70	5.1K ohm		
R358	06S64995F90	36K ohm		
R359	06S64995F90	36K ohm		
R360	06S64995F29	100 ohm		
R361	06S64995F29	100 ohm		
R362	06S64995F85	22K ohm		
R363	06S64995F85	22K ohm		
R364	06S64995F37	220 ohm		
R365	06S64995F37	220 ohm		
R366	06S64995F55	1.2K ohm		
R367	06S64995F55	1.2K ohm		
R368	06S64995F33	150 ohm		
R369	06S64995F33	150 ohm		
R370	06S64995F77	10K ohm		
R371	06S64995F77	10K ohm		
R372	06S64995F77	10K ohm		
R373	06S64995F77	10K ohm		
R374	06S64995F77	10K ohm		
R375	06S64995F77	10K ohm		
R376	06S64995F77	10K ohm		
R377	06S64995F77	10K ohm		
R602	06S64995F93	47K ohm		
R605	06S64995F93	47K ohm		
R608	06S64995F85	22K ohm		
R610	06S64995F77	10K ohm		
R611	06S64996F02	100K ohm		

Symbol No.	Part No.	Description		
R619	06S64995F77	10K ohm		
R620	06S64995F77	10K ohm		
R622	06S64995F77	10K ohm		
R623	06S64996F02	100K ohm		
R625	06S64995F85	22K ohm		
R801	06S53330F69	4.7K ohm 1/8W		
R802	06S64996F02	100K ohm		
R803	06S53330F77	10K ohm 1/8W		
R804	06S64995F69	4.7K ohm		
R805	06T70072F17	33 ohm 1/4W		
R806	06S53330F77	10K ohm 1/8W		
R807	06S64995F77	10K ohm		
R808	06S64995F77	10K ohm		
R809	06S53330F61	2.2K ohm 1/8W		
R810	06T70072F04	8.2 ohm 1/4W		
R811	06T70072F04	8.2 ohm 1/4W		
R812	06S53330F77	10K ohm 1/8W		
R813	06S53330F61	2.2K ohm 1/8W		
R816	06S64995F77	10K ohm		
R817	06S53330F61	2.2K ohm 1/8W		
R818	06T70072F29	100 ohm 1/4W		
R819	06T70072F29	100 ohm 1/4W		
R820	06T70072F29	100 ohm 1/4W		
R821	06S53330F45	470 ohm 1/8W		
R822	06S53330F53	1K ohm 1/8W		
R824	06S53330F73	6.8K ohm 1/8W		
R825	06S53330F37	220 ohm 1/8W		
R826	06S53330F53	1K ohm 1/8W		
R829	06S53330F77	10K ohm 1/8W		
R831	06T70072F61	2.2K ohm 1/4W		
R832	06S64995F77	10K ohm		
R6004	06T72174F03	Block 47K ohm x 4		
R6006	06T72174F04	Block 47K ohm x 5		
VR101	18T81058F13	Volume 10K ohm		
VR102	18T81058F13	Volume 10K ohm		
VR302	18T11628W01	Volume, Control (BAL/VOLFADER)		

Front Panel P.C. Board

IC's				
IC301	51T92001F01	BA4560F		
IC401	51T11037W01	BU4021BF		
IC402	51T15269W01	MSC1149		

Symbol No.	Part No.	Description		
Transistors				
Q401	48T62967F03	CP., DTC124K		
Q402	48T62967F03	CP., DTC124K		
Diodes/LEDs				
D401	48T90681F01	CP., MA110		
D402	48T90681F01	CP., MA110		
D403	48T90681F01	CP., MA110		
D404	48T90681F01	CP., MA110		
LD401	48T74519F05	LED AA3668S (ORG)		
LD402	48T74519F05	LED AA3668S (ORG)		
LD403	48T15700W02	LED MBG4868K (GRN)		
LD404	48T15700W02	LED MBG4868K (GRN)		
LD405	48T15700W02	LED MBG4868K (GRN)		
LD406	48T15700W02	LED MBG4868K (GRN)		
LD409	48T15700W02	LED MBG4868K (GRN)		
LD410	48T15700W02	LED MBG4868K (GRN)		
Switches				
S401	40T10876W12	TACT, SKHLAJ(LEVEL HI/LO)		
S402	40T10876W12	TACT, SKHLAJ(PEAK HOLD)		
S403	40T10876W12	TACT, SKHLAJ(FF)		
S404	40T10876W12	TACT, SKHLAJ(REW)		
S405	40T10876W12	TACT, SKHLAJ(MS.FWD)		
S406	40T10876W12	TACT, SKHLAJ(MS.RWD)		
S407	40T10876W12	TACT, SKHLAJ(PROG)		
S408	40T10876W12	TACT, SKHLAJ(PROG)		
S409	40T10876W12	TACT, SKHLAJ(DOLBY)		
S410	40T10876W12	TACT, SKHLAJ(REPEAT)		
S411	40T10876W12	TACT, SKHLAJ(LOUD)		
S412	40T10876W12	TACT, SKHLAJ(SCAN)		
S413	40T10876W12	TACT, SKHLAJ(R.EJ)		
S414	40T10876W12	TACT, SKHLAJ(B.SKIP)		
S415	40T10876W12	TACT, SKHLAJ(EJECT)		
S416	40T10876W12	TACT, SKHLAJ (TAPE PLAY/PAUSE)		
Lamps				
PL401	65T80297F05	Pilot, 6V-65mA		
PL402	65T95274F02	Pilot, 6V-70mA		
PL403	65T95274F02	Pilot, 6V-70mA		
PL404	65T95274F02	Pilot, 6V-70mA		

Symbol No.	Part No.	Description		
Capacitors				
C303	08T90316F19	TF., 0.015μF		
C304	08T57851F03	TF., 0.015μF		
C305	08T90316F14	TF., 5600pF		
C306	08T90316F14	TF., 5600pF		
C307	08S65128F49	CP., 390pF		
C308	08S65128F49	CP., 390pF		
C309	08S65128F35	CP., 100pF		
C310	08S65128F35	CP., 100pF		
Resistors	(ALL resistors are chip 1/16W±5% unless otherwise noted.)			
R301	06S64995F83	18K ohm		
R302	06S64995F83	18K ohm		
R303	06S64995F64	3K ohm		
R304	06S64995F64	3K ohm		
R305	06S64995F83	18K ohm		
R306	06S64995F83	18K ohm		
R307	06S64996F26	1M ohm		
R308	06S64996F26	1M ohm		
R309	06S64995F64	3K ohm		
R310	06S64995F64	3K ohm		
R314	06S64995F53	1K ohm		
R315	06S64995F53	1K ohm		
R401	06S64995F93	47K ohm		
R402	06S64995F93	47K ohm		
R403	06S64995F93	47K ohm		
R404	06S64995F93	47K ohm		
R405	06T70072F49	680 ohm 1/4W		
R406	06T70072F49	680 ohm 1/4W		
R407	06T70072F43	390 ohm 1/4W		
R408	06T70072F20	43 ohm 1/4W		
R409	06T70072F47	560 ohm 1/4W		
R410	06T70072F20	43 ohm 1/4W		
R411	06T70072F47	560 ohm 1/4W		
VR301 LD407 LD408	18T93886F03	Volume, Slide(TREB/BASS) 100Kohm x 2 (GRN)		
GR Control P.C. Board				
IC				
IC501	51T63506F01	PU4124		

Symbol No.	Part No.	Description		
Transistors				
Q501	48T62967F03	CP., DTC124K		
Q502	48T62967F02	CP., DTC114K		
Q503	48T62967F02	CP., DTC114K		
Q504	48T62967F02	CP., DTC114K		
Q507	48T52547F02	2SB793A		
Q508	48T52438F03	CP., 2SD601A		
Q509	48T52547F02	2SB793A		
Q510	48T52547F02	2SB793A		
Q511	48T93828F03	2SD1994A		
Q512	48T93828F03	2SD1994A		
Diodes				
D501	48T44813F01	MA165TA		
D502	48C40235G02	10E2		
D503	48T44813F01	MA165TA		
D504	48T44813F01	MA165TA		
ZD501	48T68697F43	ZEN., HZS11EB2		
Capacitor				
C501	23S82482F02	ELY., 100μF/16V		
Resistors	(ALL resistors are chip 1/8W ± 5% unless otherwise noted.)			
R501	06S81094F01	MF., 2.2 ohm 1/2W		
R502	06S53330F77	10K ohm		
R503	06S53330F84	20K ohm		
R505	06S53330F77	10K ohm		
R506	06S53330F77	10K ohm		
R507	06T67581F32	CF., 1K ohm 1/2W		
R508	06T67581F32	CF., 1K ohm 1/2W		
R509	06T67581F32	CF., 1K ohm 1/2W		
R510	06T67581F32	CF., 1K ohm 1/2W		
R511	06S53330F77	10K ohm		
R512	06S53330F77	10K ohm		
R513	06S53330F84	20K ohm		
R514	06S53330F77	10K ohm		
R515	06S53330F77	10K ohm		
R516	06S53330F77	10K ohm		
R517	06S53330F77	10K ohm		
R518	06S53330F77	10K ohm		
R519	06T70072F53	1K ohm 1/4W		
R520	06S53330F94	51K ohm		
R521	06S53330F89	33K ohm		
R522	06T70072F53	1K ohm 1/4W		

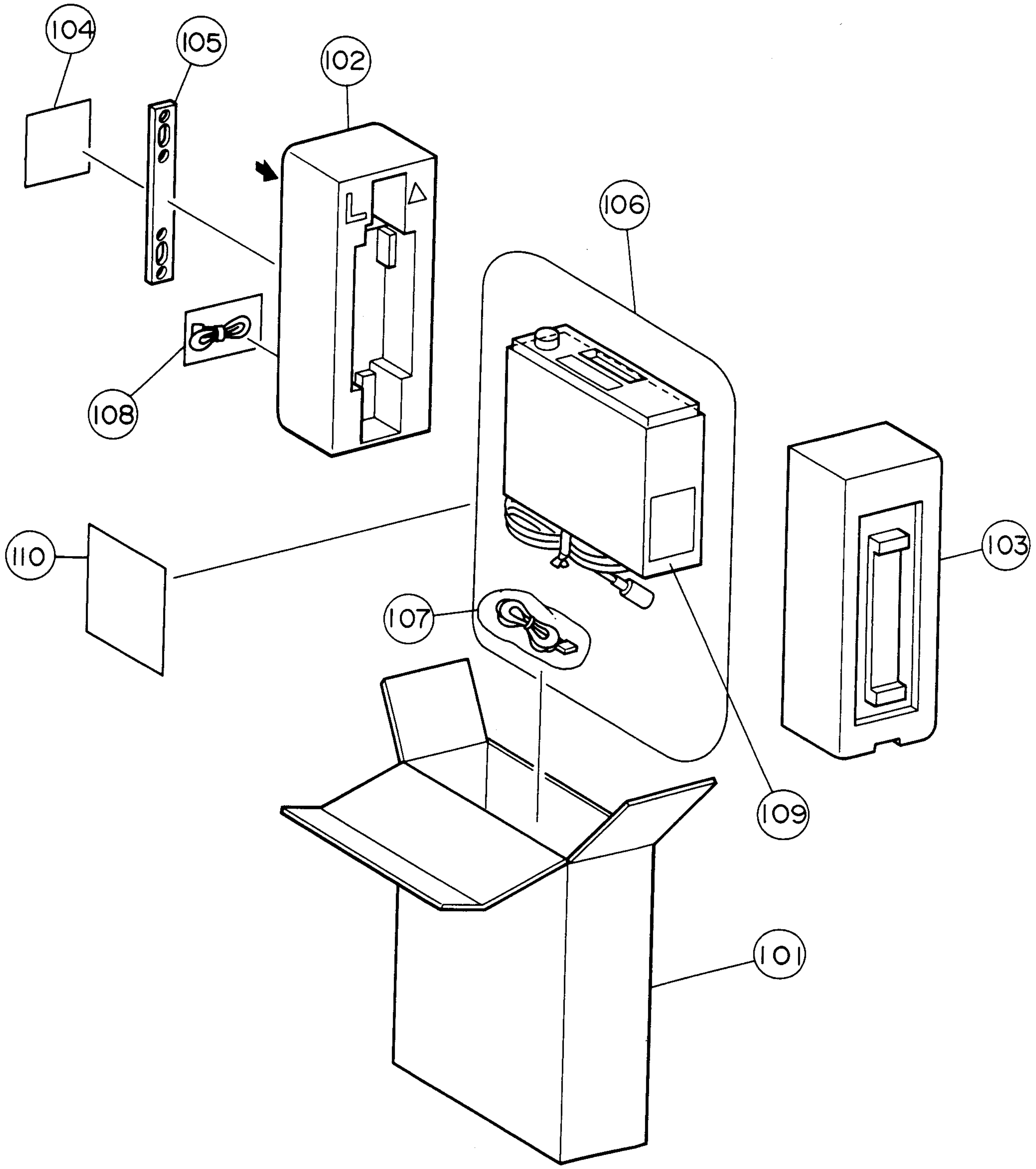
Symbol No.	Part No.	Description		
		GR Audio P.C. Board		
IC's				
IC1201	51T15146W01	TA7705P		
Diodes				
D1201	48T44813F01	MA165TA		
Capacitors				
C1201	23S61524F13	ELY.. 10μF/16V		
C1202	08S53332F33	CP.. 680PF		
C1203	08S53332F33	CP.. 680PF		
C1204	08S53332F33	CP.. 680PF		
C1205	08S53332F33	CP.. 680PF		
C1206	23S61524F07	ELY.. 47μF/ 6.3V		
C1207	23S61524F07	ELY.. 47μF/ 6.3V		
C1208	08T90316F18	TF.. 0.012μF		
C1209	08T90316F18	TF.. 0.012μF		
C1210	23S61524F18	ELY.. 4.7μF/25V		
C1211	23S61524F18	ELY.. 4.7μF/25V		
C1216	23S82482F02	ELY.. 100μF/16V		
Resistors	(ALL resistors are chip 1/8W ± 5% unless otherwise noted.)			
R1201	06S53330F29	100 ohm 1/8W		
R1202	06S53330F32	130 ohm 1/8W		
R1203	06S53330F32	130 ohm 1/8W		
R1204	06S64996F14	330K ohm		
R1205	06S64996F14	330K ohm		
R1208	06S64995F78	11K ohm		
R1209	06S64995F78	11K ohm		
R1210	06S64995F81	15K ohm		
R1211	06S64995F81	15K ohm		
R1212	06S64995F65	3.3K ohm		
R1213	06S64995F65	3.3K ohm		

Symbol No.	Part No.	Description		
		Miscellaneous		
HD101	88T10373W01	Head		
M501	01V11500W64	Assy., Motor		
PT501	51T15144W01	Sensor, Photo		
S501	40T15222W01	Switch, Detector(Pack In)		
S502	40T15382W01	Switch, Detector (Pack Down)		
S503	40T15382W01	Switch, Detector(Metal)		
SD501	01T10369W01	Assy., Eject Solenoid		
SD502	01T15249W01	Assy., Play Solenoid		
SD503	01T10371W01	Assy., RF Solenoid		
E801	01T16229W01	Assy., Connector QRB (Socket)		
FL401	65T15703W01	FL. Display		
BA801	60T91060F03	Batery, Lithium 3V		

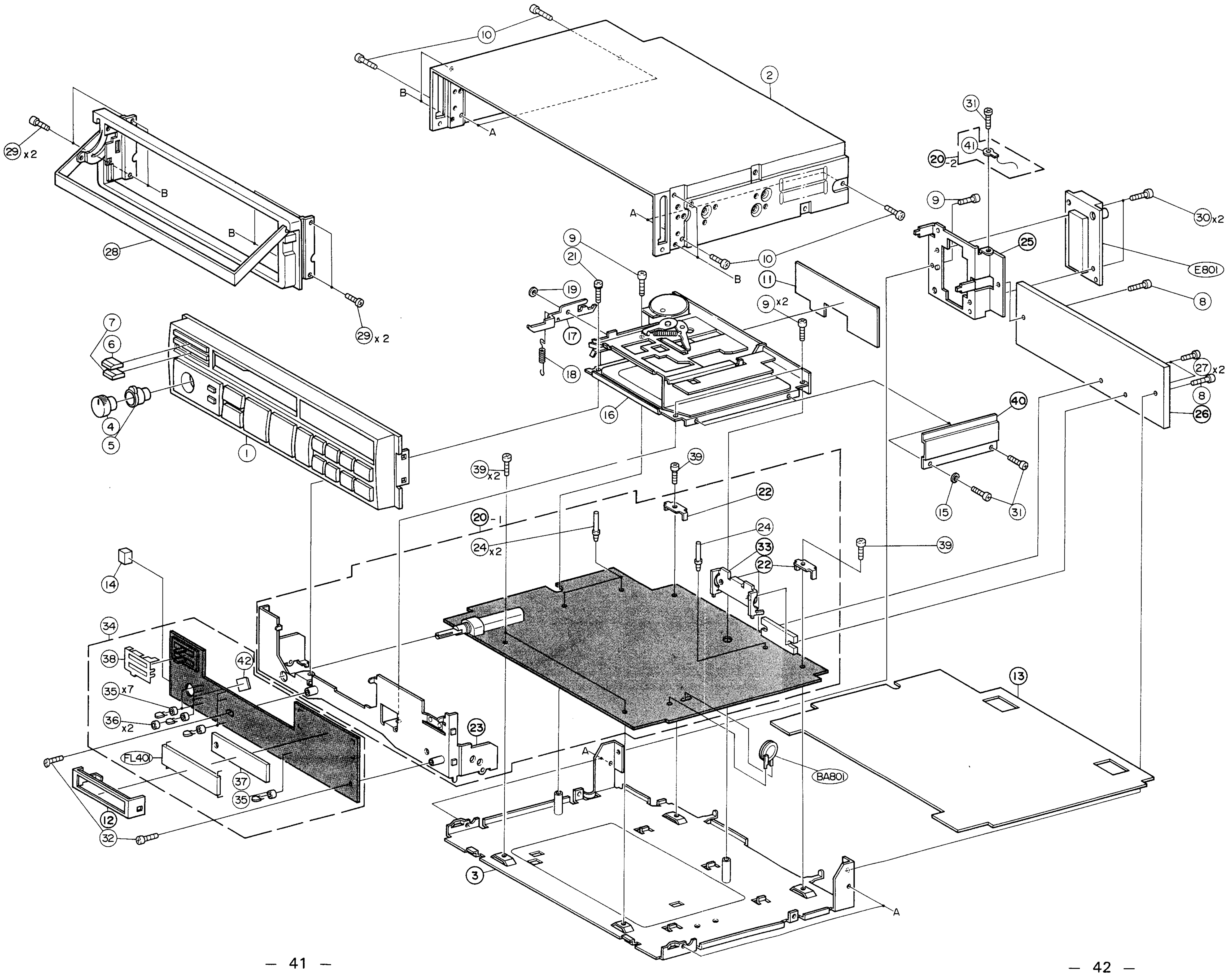
Packing Assembly Parts List

Symbol No.	Part No.	Description		
101	56S12717W61	Carton, Packing (Individual)		
102	56D82187F01	Tray, Packing (L)		
103	56D82187F02	Tray, Packing (R)		
104	01V11900W95	Assy., Xit Installation		
104-1	02B47353F01	Nut Hex (M5)		
104-2	03S40012G66	Screw, Tapping (M5x20)		
104-3	03B44963F03	Bolt, Hex W/Washer (M5x10)		
104-4	03A40155F05	Bolt, Hex (M5x14)		
104-5	03A40155F01	Bolt, Hex (M5x8)		
104-6	03A84814F04	Screw, Bind (M2.6x18)		
104-7	43A58272F04	Spacer		
105	07B64552F01	Btacket, Strap Receiver		
106	56B40990T36	Sack, Polyethylene		
107	01T15832W01	Assy., RCA-RCA600 (New)		
108	01T96095F01	Assy., Connector 4P		
109	01V16500W67	Assy., Case Mother		
109-1	15D94518F01	Case, Mother		
109-2	01T16228W01	Assy., Connector QRB (Plug)		
109-3	03S44205G33	Screw, Pan (M2.6x8)		
109-4	03S44205G07	Screw, Pan (M2.6x5)		
110	68P13420W09	Owners, Manual (5255)		

Packing Method View



Exploded View (Cabinet)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FL401
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12
32
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A
BA801
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G
H

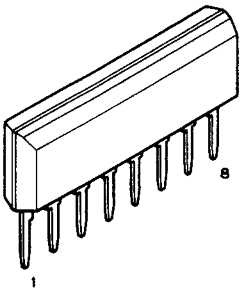
Cabinet Assembly Parts List

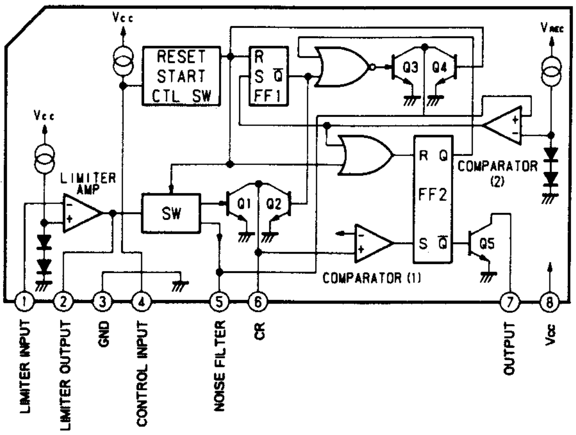
Note: The parts without part numbers are not supplied.

Symbol No.	IN-dex	Part No.	Description		
1	3-B	13D12289W02	Assy., Nose Piece		
2	1-E	15C11101W02	Cover, Top		
4	3-A	36A94114F01	Knob, Control (Front)		
5	3-A	36A94115F01	Knob, Control (Back)		
6	2-A	36B94116F01	Knob, Slide		
7	2-A	36B94116F02	Knob, Slide		
8	2-G	03S44205G76	Screw, Pan (M2.6x8)		
9		03S44205G07	Screw, Pan (M2.6x5)		
10		03A73194F05	Screw, Bind (M2.6x5)		
14		75S72374F48	Cushion		
15		04S40070G01	Washer, Flat (M3.3)		
16	2-E	81D10481W01	Cassette Deck(GR75E010)		
18	2-D	41A84062F01	Spring, Lever		
19	2-D	04A41345P22	Washer, Lock (M2.6)		
21	2-D	03S71677F06	Screw, W/Washer (M2.6x6)		
24		09T84840F01	Lug, Style 18mm		
27	2-G	03D40014G58	Screw, W/Washer (M2.6x14)		
28		07C10065W01	Assy., Bracket Handle		
29		03S44205G34	Screw, Pan (M2.6x5)		
30	2-G	03S44205G29	Screw, Pan(M2.6x6)		
31		03S44205G30	Screw, Pan (M2.6x4)		
32		03C42723U08	Screw, Cup (M2.6x5.5)		
34	4-A	01V16500W06	Assy., Front Panel		
35		07A71033F01	Support, LED		
36	4-A	43A62458F01	Bushing, Cover		
37	4-B	15B12213W01	Cover, FLT		
38	4-A	07A94609F01	Bracket, Shield		
39		03S44205G48	Screw, Pan (M2.6x5)		
41	3-F	01T16302W01	Assy., Wire 1P		
42		14S71058F23	Insulator, Cover		

Semi-Conductor Lead Indentifications

M51143AL: IC101

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FF2
S Q̄
COMPARATOR
(2)
Q5
COMPARATOR (1)
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3
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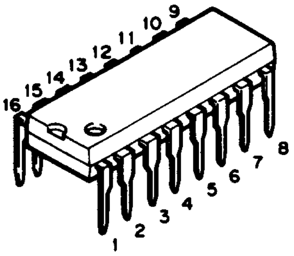
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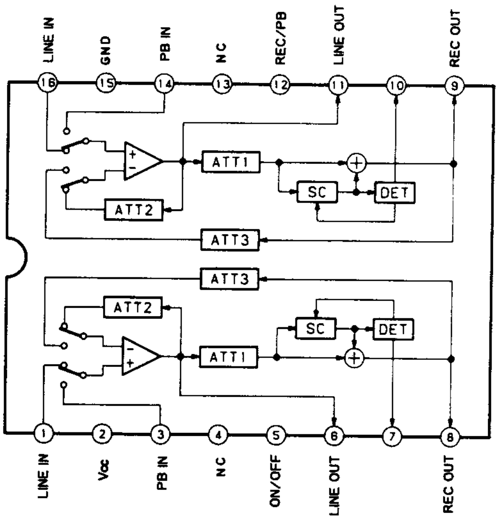
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REC OUT
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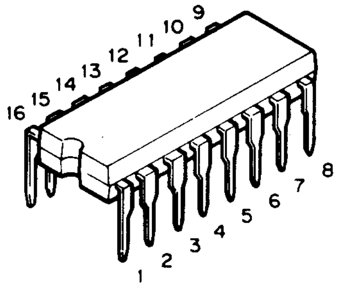
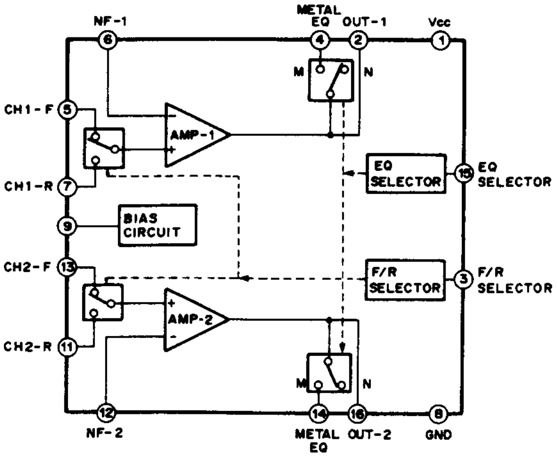
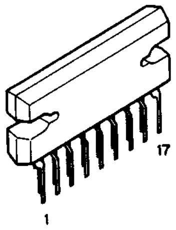
SC
DET
ATT2
ATT3
ATT3
ATT2
SC
DET
ATT1
1
2
3
4
5
6
7
8
LINE IN
Vcc
PB IN
NC
ON/OFF
LINE OUT
REC OUT

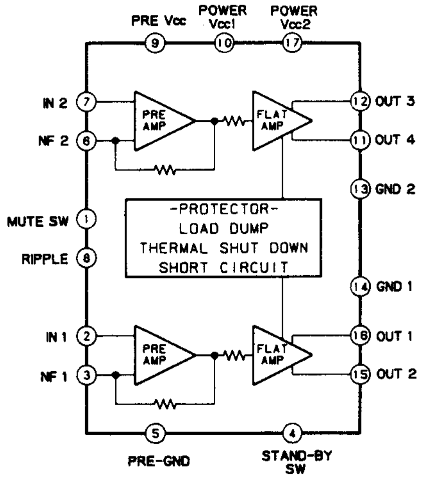
TA7705P: IC1201


16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8

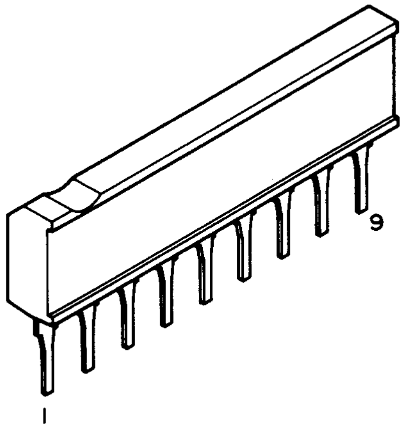

NF-1
METAL EQ
OUT-1
Vcc
6
4
2
1
M
N
CH1-F
5
AMP-1
CH1-R
7
EQ SELECTOR
15
EQ SELECTOR
9
BIAS CIRCUIT
CH2-F
13
F/R SELECTOR
3
F/R SELECTOR
AMP-2
CH2-R
11
M
N
12
14
16
8
NF-2
METAL EQ
OUT-2
GND

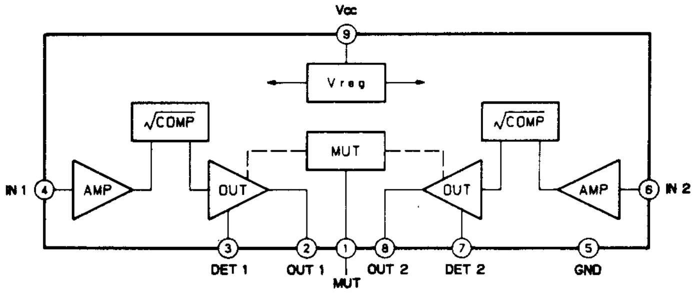
TA8205AH: IC251



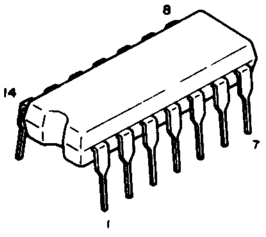

PRE Vcc
POWER Vcc1
POWER Vcc2
9
10
17
IN 2
7
NF 2
6
PRE AMP
FLAT AMP
12
OUT 3
11
OUT 4
13
GND 2
MUTE SW
1
RIPPLE
8
-PROTECTOR-
LOAD DUMP
THERMAL SHUT DOWN
SHORT CIRCUIT
14
GND 1
IN 1
2
NF 1
3
PRE AMP
FLAT AMP
16
OUT 1
15
OUT 2
5
PRE-GND
4
STAND-BY SW

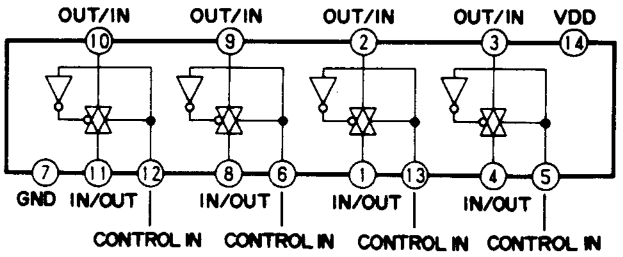
BA6138: IC252



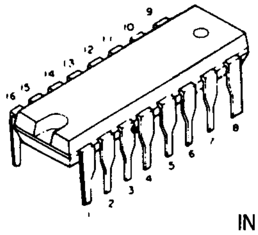

Vcc
9
Vreg
√COMP
√COMP
MUT
IN 1
4
AMP
OUT
OUT
AMP
6
IN 2
3
DET 1
2
OUT 1
1
MUT
8
OUT 2
7
DET 2
5
GND

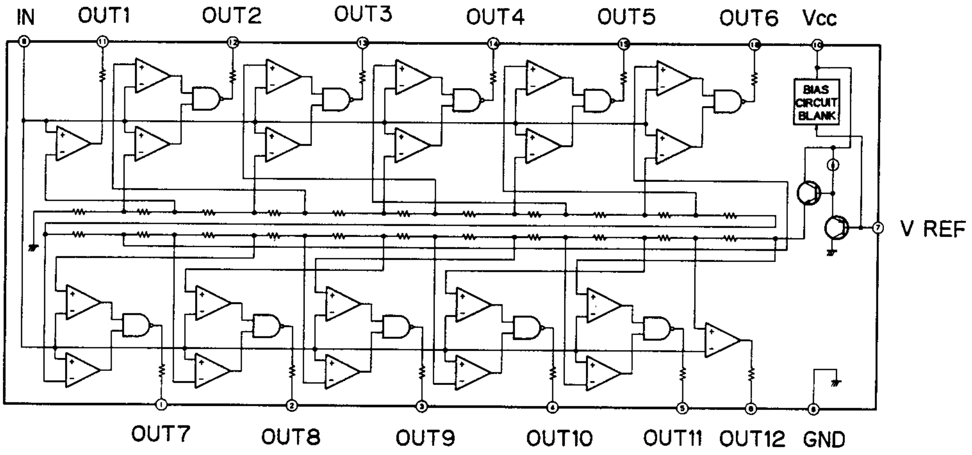
TC4066BP: IC253



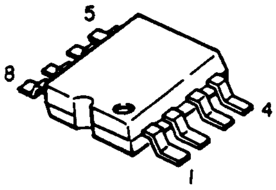

OUT/IN
10
OUT/IN
9
OUT/IN
2
OUT/IN
3
VDD
14
7
GND
11
IN/OUT
12
CONTROL IN
8
IN/OUT
6
CONTROL IN
1
IN/OUT
13
CONTROL IN
4
IN/OUT
5
CONTROL IN

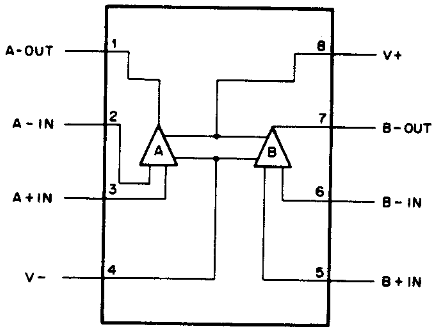
M51901: IC254


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

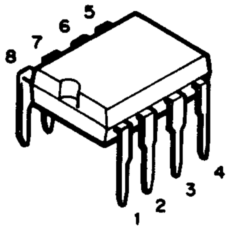

IN
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
Vcc
BIAS CIRCUIT BLANK
V REF
OUT7
OUT8
OUT9
OUT10
OUT11
OUT12
GND

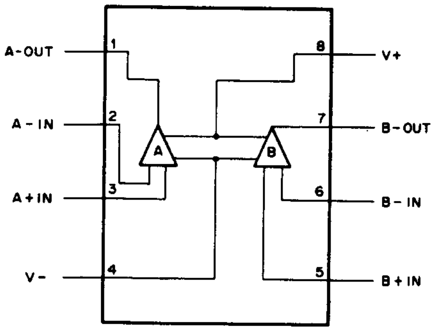
BA4560F: IC301



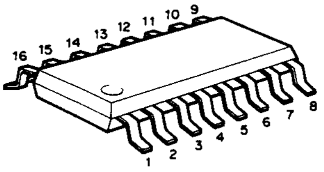

A-OUT
A-IN
A+IN
V-
1
2
3
4
8
7
6
5
A
B
V+
B-OUT
B-IN
B+IN

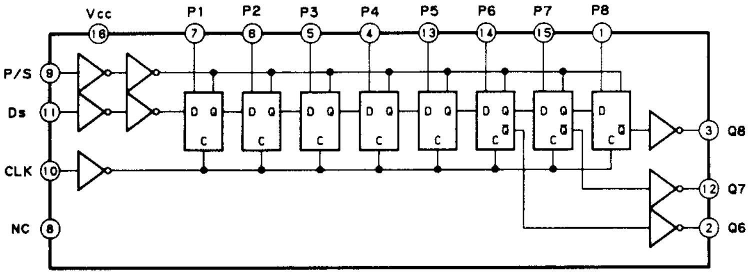
BA4560: IC351,352




A-OUT
A-IN
A+IN
V-
1
2
3
4
8
7
6
5
A
B
V+
B-OUT
B-IN
B+IN

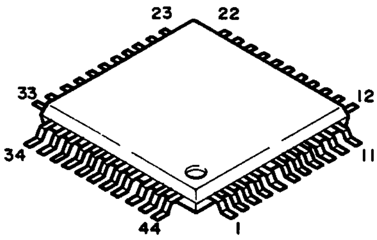
BU4021BF: IC401

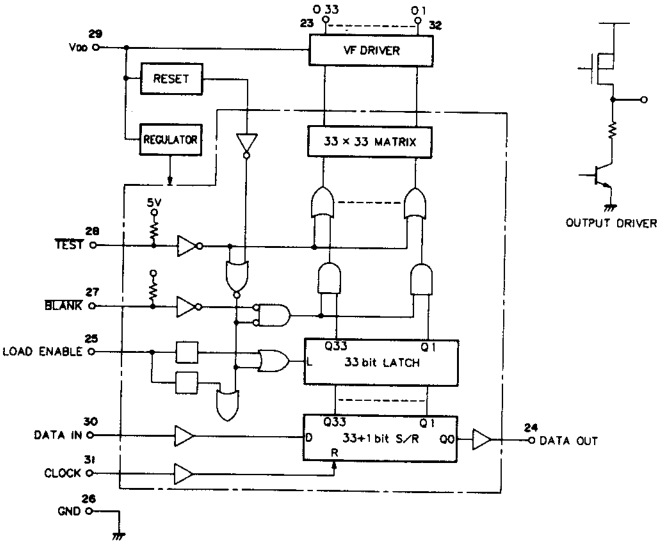

16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8


Vcc
16
P1
7
P2
6
P3
5
P4
4
P5
13
P6
14
P7
15
P8
1
P/S
9
Ds
11
CLK
10
NC
8
D Q
C
3
Q8
12
Q7
2
Q6

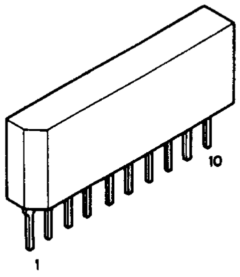
MSC1149: IC402

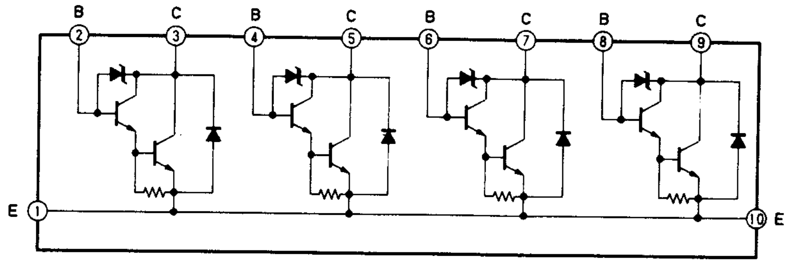
Pin No.	Description	Pin No.	Description	Pin No.	Description	Pin No.	Description
1	OUT PUT 13	12	OUT PUT 23	23	OUT PUT 33	34	OUT PUT 3
2	OUT PUT 14	13	OUT PUT 24	24	DATE OUT	35	OUT PUT 4
3	OUT PUT 15	14	OUT PUT 25	25	LOAD ENABLE	36	OUT PUT 5
4	OUT PUT 16	15	OUT PUT 26	26	GND	37	OUT PUT 6
5	OUT PUT 17	16	OUT PUT 27	27	$\overline{\text{BLANK}}$	38	OUT PUT 7
6	NC	17	NC	28	$\overline{\text{TEST}}$	39	NC
7	OUT PUT 18	18	OUT PUT 28	29	V_{DD}	40	OUT PUT 8
8	OUT PUT 19	19	OUT PUT 29	30	DATA IN	41	OUT PUT 9
9	OUT PUT 20	20	OUT PUT 30	31	CLOCK	42	OUT PUT 8
10	OUT PUT 21	21	OUT PUT 31	32	OUT PUT 1	43	OUT PUT 11
11	OUT PUT 22	22	OUT PUT 32	33	OUT PUT 2	44	OUT PUT 12


23
22
33
12
34
11
44
1

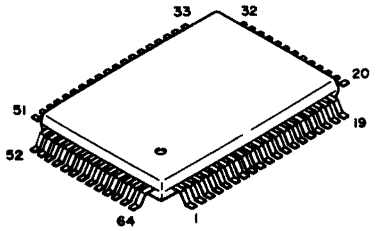

O 33
O 1
23
32
29
VDD
VF DRIVER
RESET
REGULATOR
33 × 33 MATRIX
5V
28
TEST
27
BLANK
25
LOAD ENABLE
Q33
Q 1
L
33 bit LATCH
30
DATA IN
Q33
Q 1
D
33+1 bit S/R
Q0
R
24
DATA OUT
31
CLOCK
26
GND
OUTPUT DRIVER

PU4124: IC501



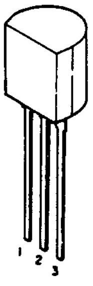

B
C
B
C
B
C
B
C
2
3
4
5
6
7
8
9
E
1
10
E

15738W02: IC601

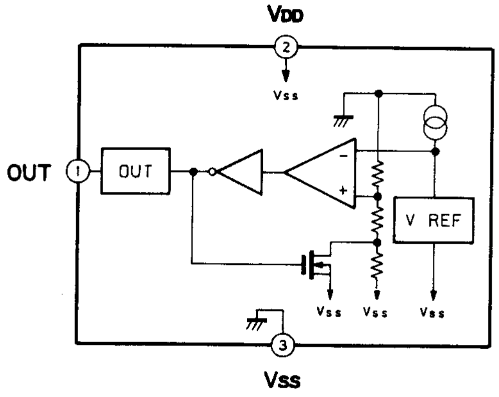

33
32
20
51
19
52
64
1

Pin No.	Description	Pin No.	Description	Pin No.	Description	Pin No.	Description
1	RUN DET	17	MUSIC SENSOR	33	AD3	49	LOAD
2	PACK DOWN	18	NC	34	AD2	50	NC
3	PLAY SOL	19	NC	35	AD1	51	NC
4	RF SOL	20	NC	36	DIMMER	52	$\overline{\text{LOUDO}}$
5	EJECT SOL	21	NC	37	NC	53	POWER
6	MOTOR CONT	22	HI / LO	38	NC	54	POWER
7	$\overline{\text{RESET}}$	23	R / $\overline{\text{L}}$	39	NC	55	POWER
8	X2	24	DOLBY	40	OE	56	POWER
9	X1	25	KEY P / S	41	KEY IN	57	V_{DD}
10	LEVEL O FAST	26	GND	42	NC	58	V_{DD}
11	MOTOR FAST	27	GND	43	NC	59	POW CONT
12	O. MOTOR	28	NC	44	BATT	60	$\overline{\text{MUTE}}$
13	F / $\overline{\text{R}}$	29	ACC	45	DATA	61	OUT REM
14	PACK IN	30	GND	46	CLOCK	62	$\overline{\text{T}}$ / R
15	METAL	31	AD5	47	NC	63	IN INT
16	MUSIC SENSOR	32	AD4	48	NC	64	IN PAUSE

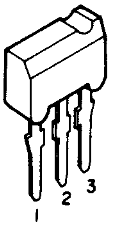
S-8052ALR: IC602

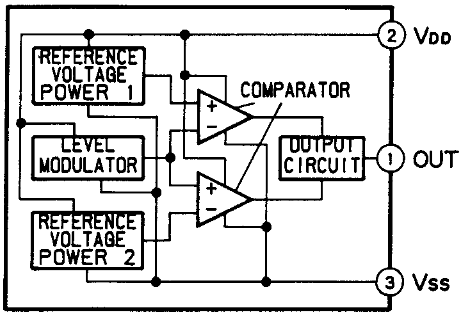


1. OUT
2. V_{DD}
3. V_{SS}

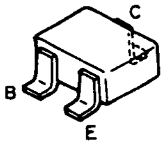

VDD
2
Vss
OUT
1
OUT
-
+
V REF
Vss
Vss
Vss
3
Vss

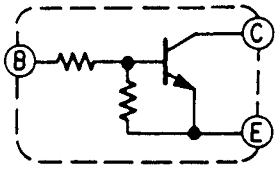
MN1280: IC603



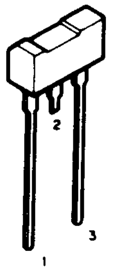

REFERENCE VOLTAGE POWER 1
LEVEL MODULATOR
REFERENCE VOLTAGE POWER 2
COMPARATOR
OUTPUT CIRCUIT
2 VDD
1 OUT
3 Vss

DTC114EU: Q808,817
DTC124EU: Q102,201,254,806,810
Q813,821
DTC124K: Q401,402,501,601,605
DTC114K: Q502,503,504



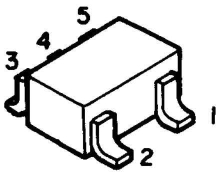


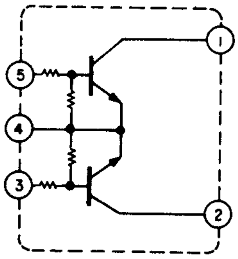
2SC4038: Q202,815
2SD1860: Q814
2SD1863: Q816
2SD1992: Q802,803
2SD1994: Q511,512



1. Emitter
2. Collector
3. Base

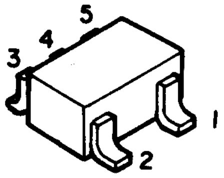
FMG1: Q253

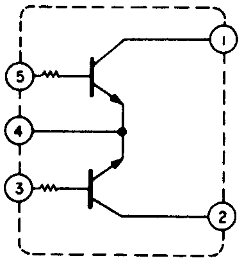




1. Collector
2. Collector
3. Base
4. Emitter
5. Base

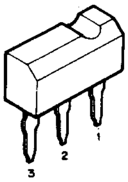
FMG4: Q331





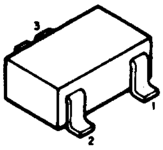
1. Collector
2. Collector
3. Base
4. Emitter
5. Base

2SB644: Q812
2SB793A: Q507,509,510
2SB911M: Q805,807



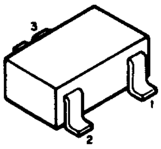
1. Emitter
2. Collector
3. Base

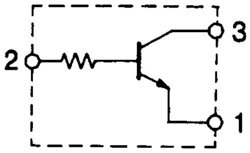
2SA1576: Q809
2SD601A: Q508



1. Emitter
2. Base
3. Collector

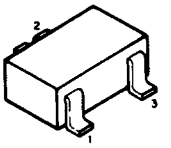
DTC114TU: Q822
DTC144TU: Q101
DTC363T: Q251,252,332
Q333,351,352

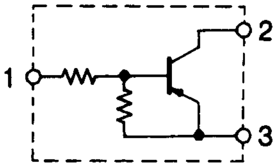




1. Emitter
2. Base
3. Collector

DTA124: Q604
DTA124EU: Q820





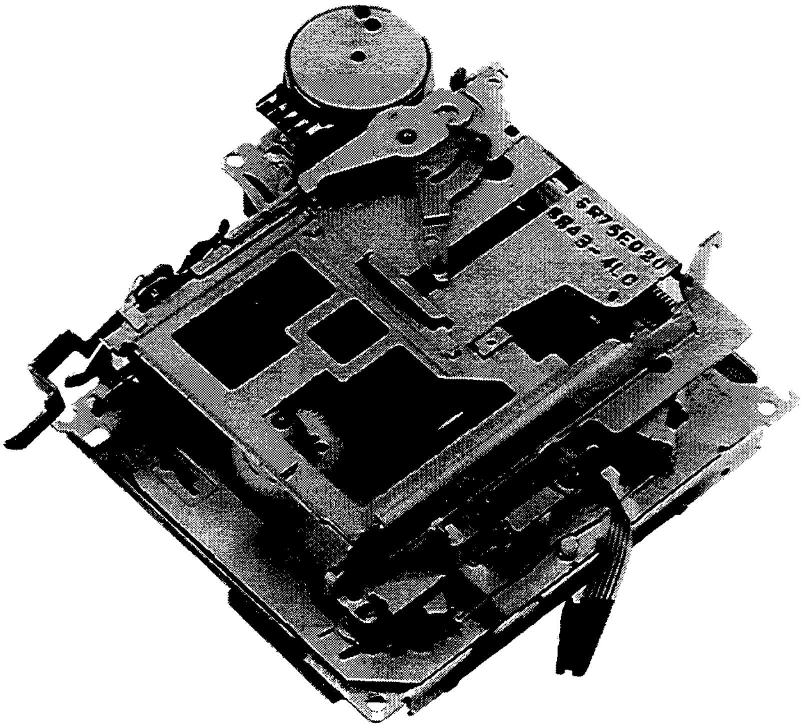
1. Base
2. Collector
3. Emitter

ALPI-00293

ALPINE® SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED(V)


6R75E020
8843-ALC

GR/GR-Y SERIES

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List of Usable Jigs 3

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Cassette Deck Assembly Parts List (GR75E Series) (1/4) .... 19 to 20

Exploded View (GR75L Series) (2/4) .... 21 to 22

Cassette Deck Assembly Parts List (GR75L Series) (2/4) .... 23 to 24

Exploded View (GR-Y Series) (3/4) .... 25 to 26

Cassette Deck Assembly Parts List (GR-Y Series) (3/4) .... 27 to 28

Exploded View (GR75H Series) (4/4) .... 29 to 30

Cassette Deck Assembly Parts List (GR75H Series) (4/4) .... 31 to 32

List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY			
			GR75E Series	GR75L Series	GR-Y Series	GR75H Series
1	(M1.2 × 3.5 × 0.25)	04B41345P01	4	4	4	2
2	(M1.7 × 3.5 × 0.25)	04B41345P02	1	1	1	4
3	(M1.2 × 2.5 × 0.25)	04B41345P11	8	8	8	9
4	(M1.7 × 3.5 × 0.35)	04B41345P12	2	2	2	2
5	(M1.2 × 3.5 × 0.35)	04B41345P15	2	2	2	2
6	(M1 × 2.5 × 0.25)	04B41345P17	1	1	1	2
7	(M2.6 × 5 × 0.25)	04B41345P29	1	1	1	1
8	(M3.1 × 8 × 0.05)	04B41345P30	1	1	1	1
9	(M3.1 × 5 × 0.35)	04B41345P32	2	2	2	2
10	(M1.2 × 2.5 × 0.3)	04B41345P34	1	1	1	0
11	(M1.7 × 2.8 × 0.25)	04B41345P35	1	1	1	2
12	(M2.1 × 4 × 0.25)	04B41345P37	1	1	1	0
13	(M2.1 × 4 × 0.13)	04S40075G05	2	2	2	0
14	(M2.1 × 4 × 0.3)	04S40075G58	0	0	0	1

List of Usable Oil

1) Molykote G paste
2) Grease EM-30L
3) Grease PG-671

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   AI-500 (Part No. AI-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.

(2) Remove M1 lock washer ① as shown in Figure 1.

(3) Remove three screws ② as shown in Figure 1.

(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.

(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.

(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.

(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.

(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.

(9) Turn the mechanism around as shown in Figure 3.

(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.

(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)

(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly in the direction Ⓐ-11.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figures 4 and 5.)

(13) Fix the screws and the lock washer that have been removed.

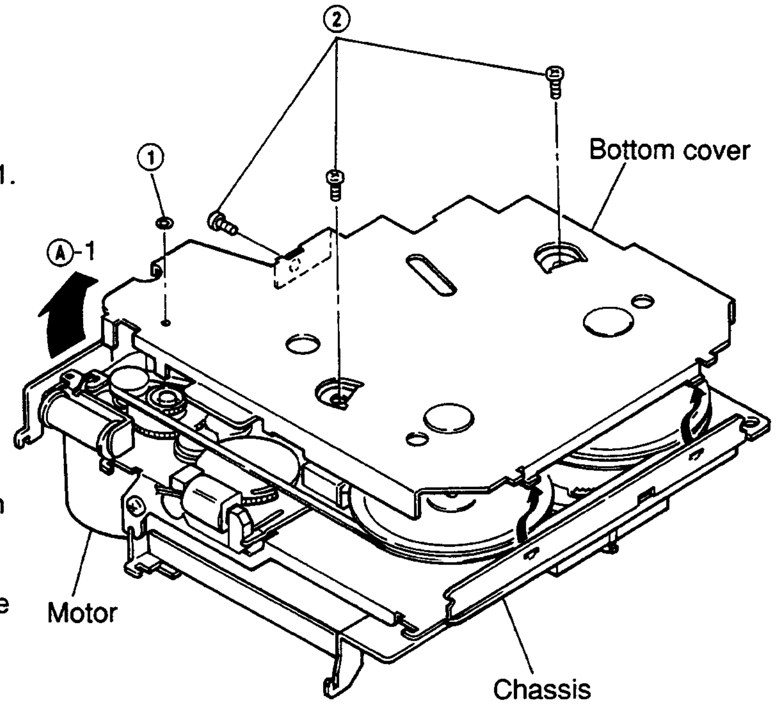


Figure 1

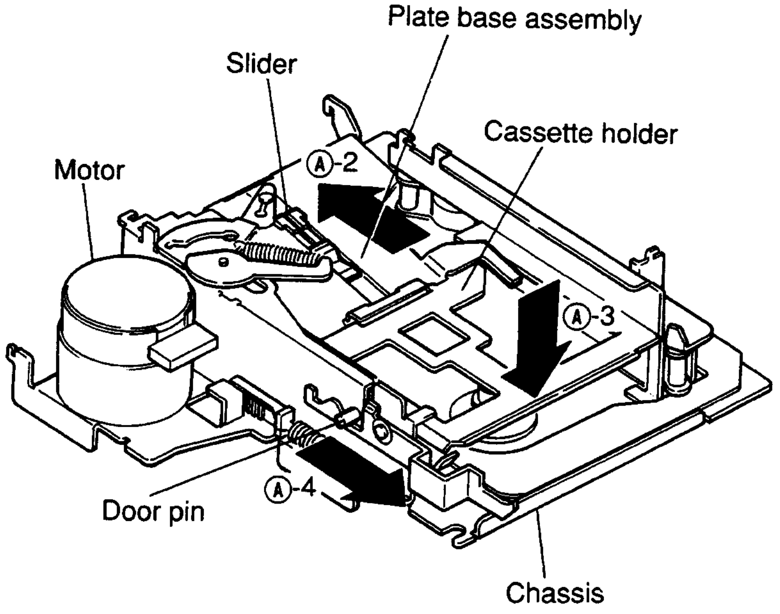


Figure 2

(14) Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg.cm.

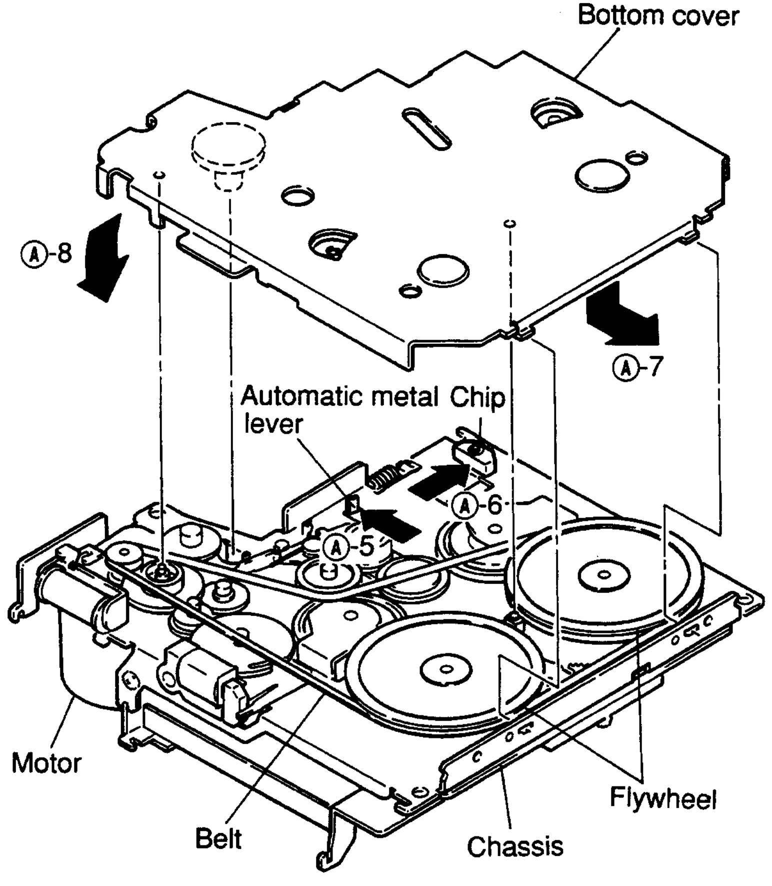


Figure 3

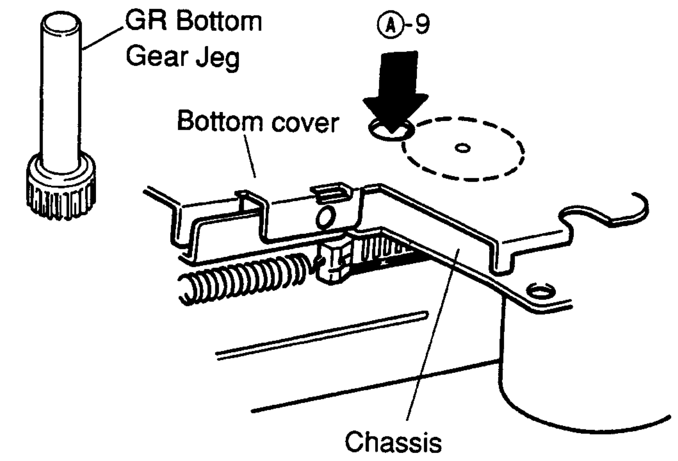


Figure 4

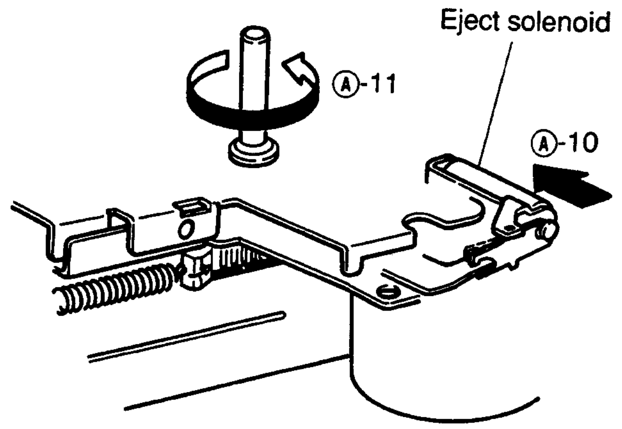


Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear

(1) Remove M1.2 lock washer ③ as shown in Figure 6.
(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.
(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid

(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.
(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

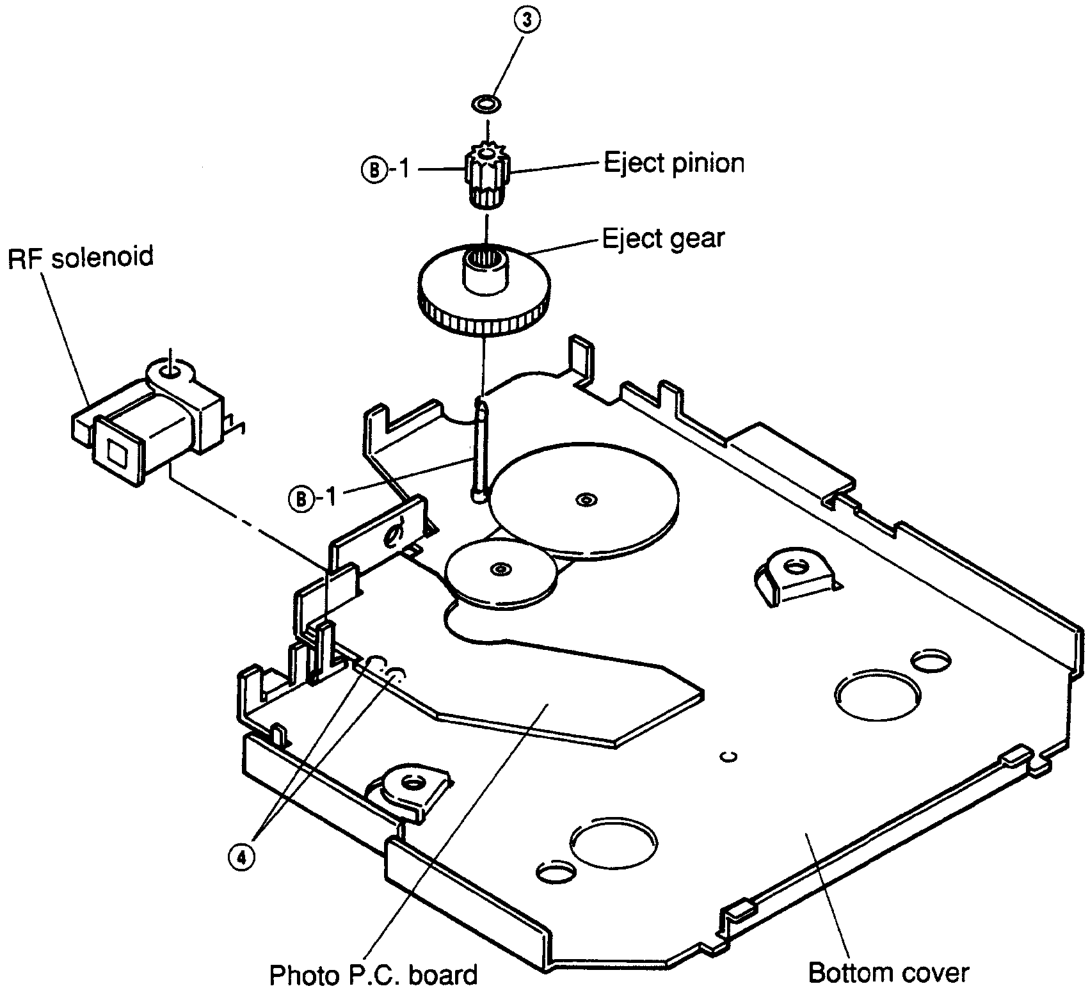


Figure 6

c. Replacement of the photo sensor

(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo P.C. board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked Ⓑ-2 as shown in Figure 7.
(4) Insert the photo guide into the P.C. board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch
(Automatic metal pack-in)

(1) Remove 4 solders ⑥ with which the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo P.C. board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

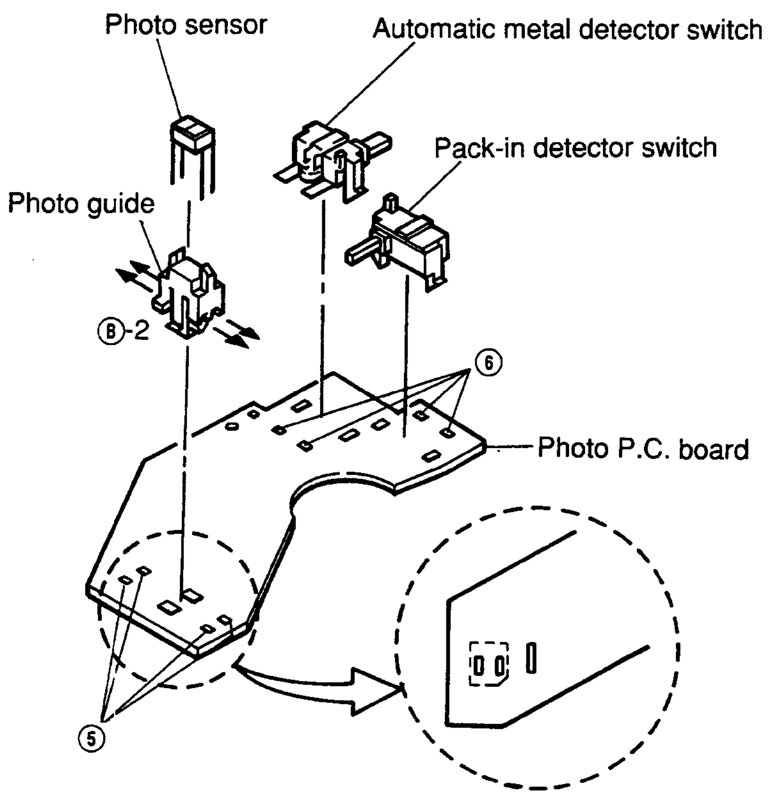


Figure 7

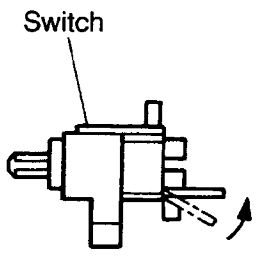


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.

(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

b. Replacement of the motor

(1) After removing the belt, remove spring ⑦ as shown in Figure 10.

(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control P.C. board as shown in Figure 11.

(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)

(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

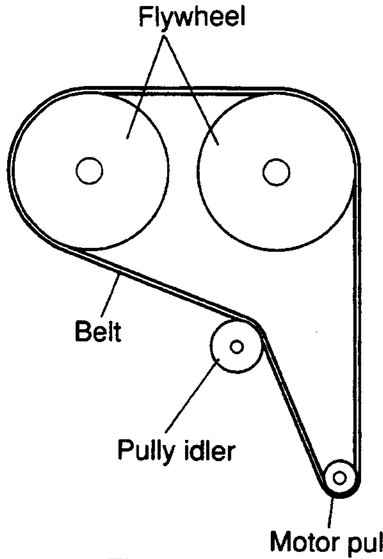
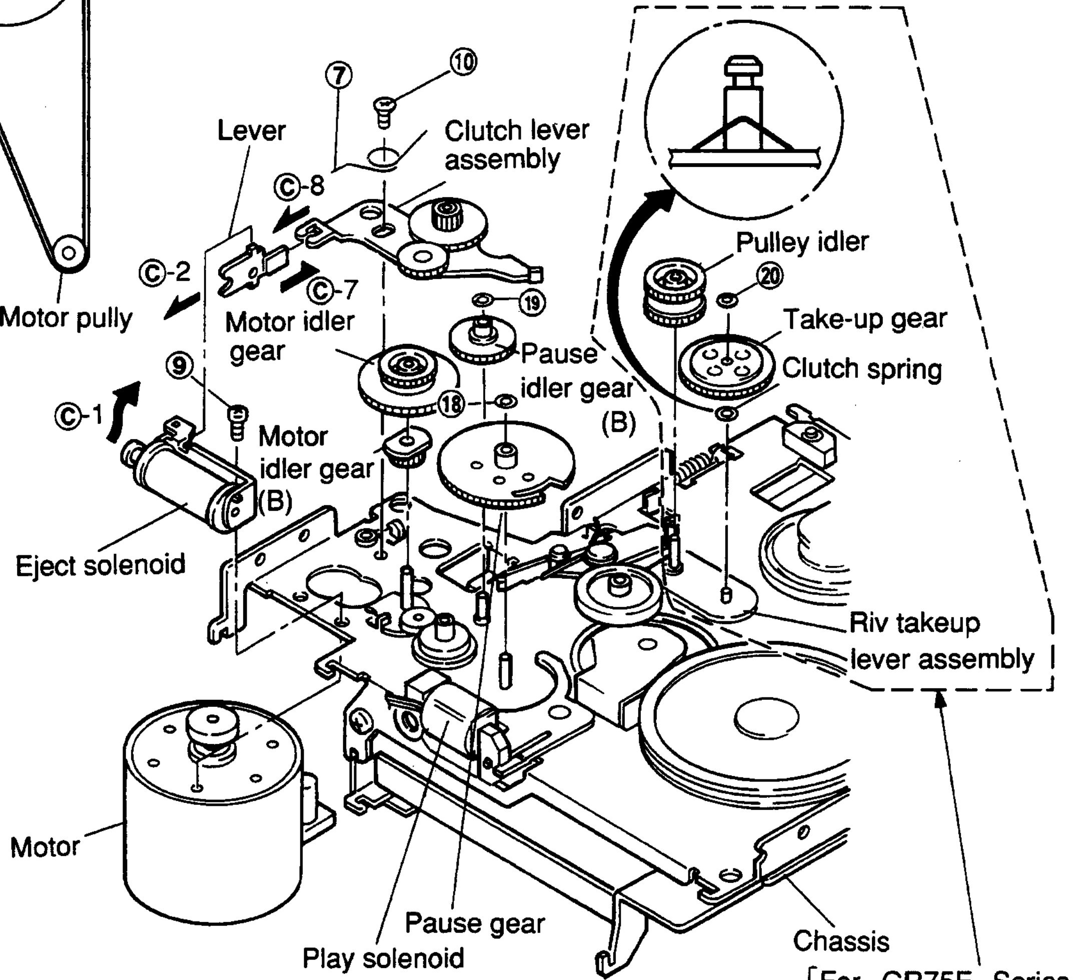

Flywheel
Belt
Pully idler
Motor pully

Figure 9


⑦
⑩
Lever
Clutch lever assembly
©-8
©-2
©-7
⑲
Pulley idler
⑳
Take-up gear
Clutch spring
Motor idler gear
⑨
Pause idler gear (B)
⑱
©-1
Motor idler gear (B)
Eject solenoid
Riv takeup lever assembly
Motor
Pause gear
Play solenoid
Chassis

[For GR75E Series
GR75L Series
GR-Y Series
models]

Figure 10

c. Replacement of the flywheels

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

d. Replacement of the play solenoid

(1) Remove the two solders ⑧-2 as shown in Figure 11.

(2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.

(3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.

e. Replacement of the eject solenoid

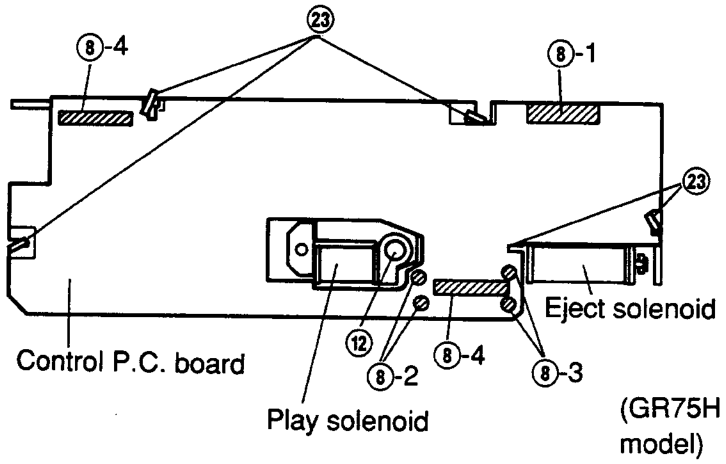
(1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)

(2) Remove screw ⑨ and remove the solenoid as shown in Figure 10.

(3) Align position ©-1 of the new solenoid with position ©-2 of the lever and fasten the screw as shown in Figure 10.

(4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm. As the solenoid wires are not insulated, do not let them cross each other.


⑧-4
㉓
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

[For GR75E Series model]

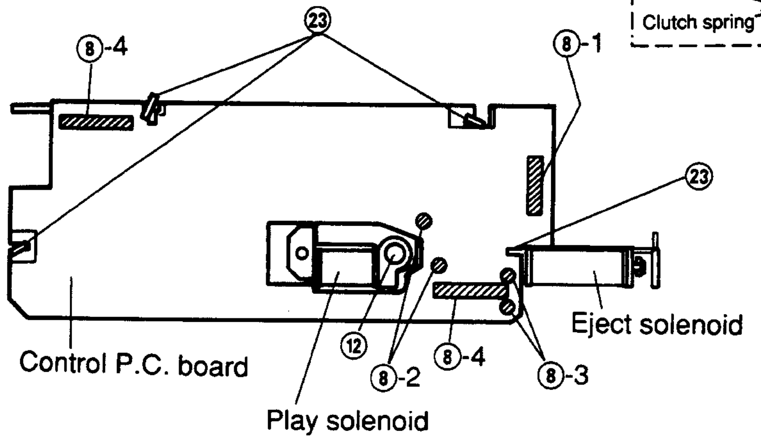

⑧-4
㉓
⑧-1
㉓
Control P.C. board
⑫
⑧-2
⑧-4
Eject solenoid
⑧-3
Play solenoid

Figure 11

[For GR75L Series
GR-Y Series
GR75H Series models]

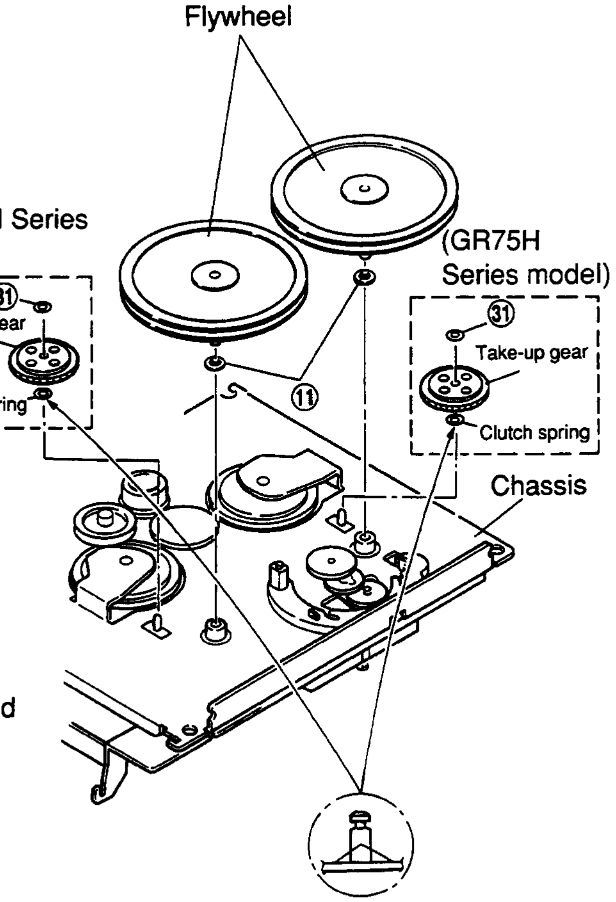

Flywheel
(GR75H Series model)
㉛
Take-up gear
Clutch spring
(GR75H Series model)
㉛
Take-up gear
Clutch spring
⑪
Chassis

Figure 12

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

(1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

(1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

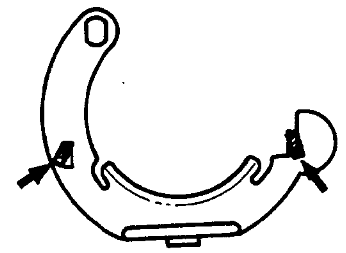
(1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ⓒ-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.
(2) Insert the section ⓒ-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

(1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.
(2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.
(3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:
After mounting all parts, check if the reverse lever moves in the directions marked ⓒ-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend the claws ⑮ into the form of as shown in the Figure.



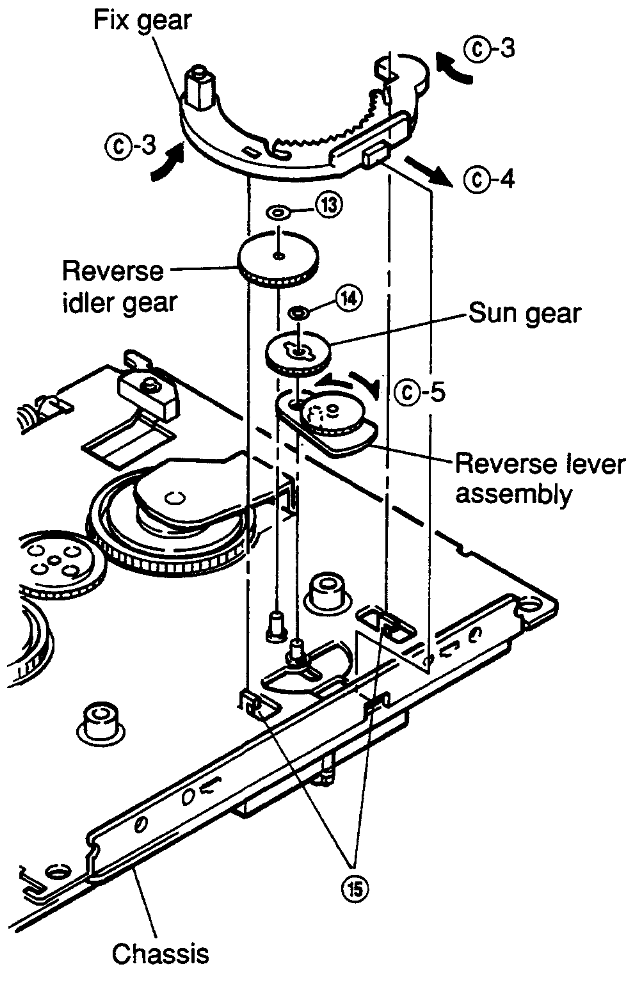


Figure 13

(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.
(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.
(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (PG-671) to the position ©-6 as shown in Figure 15. Align the position ©-7 with the position ©-8 and mount the clutch lever as shown in Figures 10 and 15.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear following the removal steps in the reverse order.

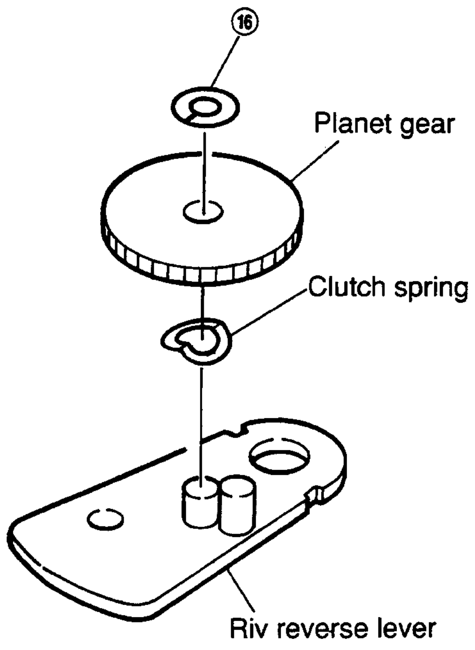
(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the riv take-up lever assembly as shown in Figure 10.
After removing the Flywheel, remove M1.2 lock washer ㉛ and remove the gear by pulling it up from the stud of the chassis as shown in figure 12. [For GR75H Series model]
(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:
Do not reuse the used washers. Take care to avoid damage by piercing and tearing.



[Disassembly Reverse Lever Assembly]

Figure 14

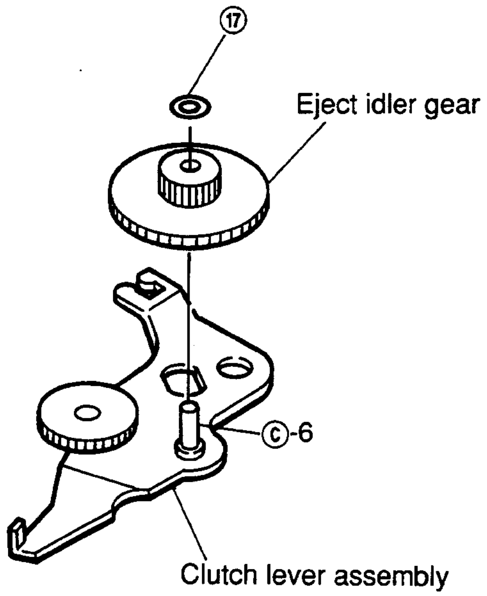


Figure 15

4. Replacement of the parts mounted on the front of the main chassis

a. Replacement of the audio P.C. board

(1) Remove two solders ㉑ and remove the parallel wire (7P) and the head P.C. board as shown in Figure 16.
(2) Adjust the two claws ㉒ to the rectangular holes on the P.C. board and remove the P.C. board as shown in Figure 16.
(3) After replacement, mount the new P.C. board following the removal steps in the reverse order.

Note: The head P.C. board and the parallel wire are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board.

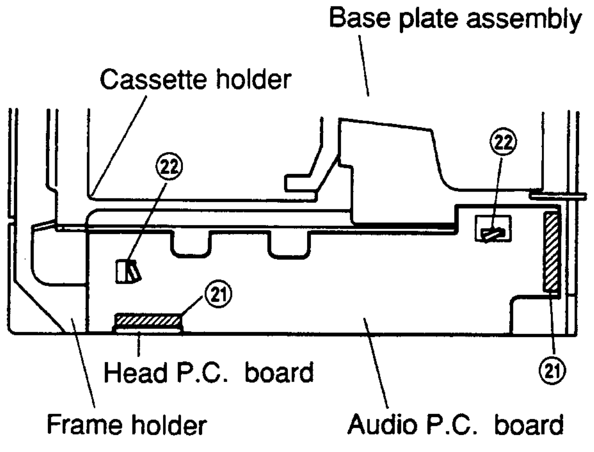


Figure 16

b. Replacement of the control P.C. board

(1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.
(2) Remove five claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75E Series model] Remove four claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75L Series, GR-Y Series, GR75H Series models]
(3) After replacing the old P.C. board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

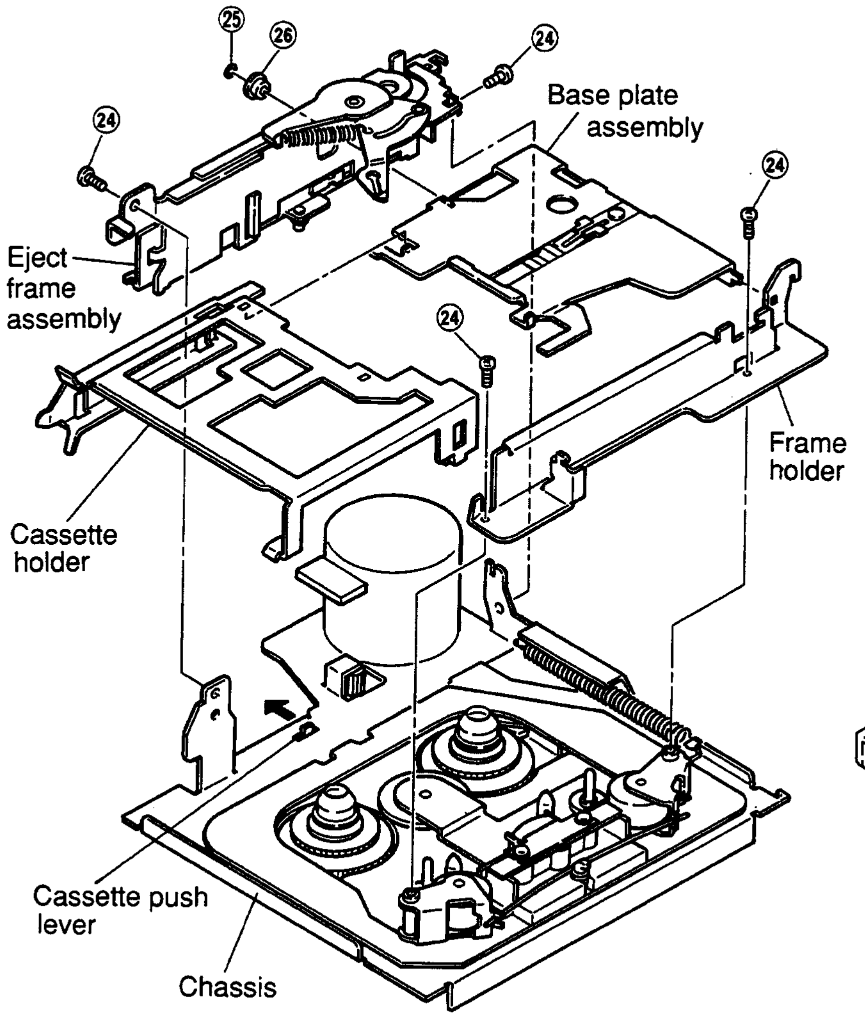


Figure 17

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.
(2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.
(3) Remount them following the removal steps in the reverse order.

Notes:
1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).
2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.
3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.
4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

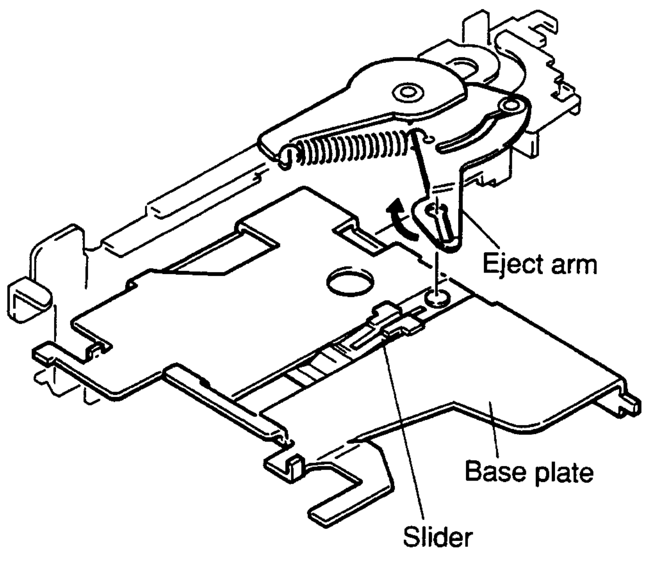


Figure 18

d. Replacement of the reels

(1) Remove M1.7 two lock washers ㉖ (Refer to figure 19).
(2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.
(3) After replacement, mount the new reels following the removal steps in the reverse order.
(4) After mounting, check the tape speed and the wow and flutter with test tape MTT-111.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

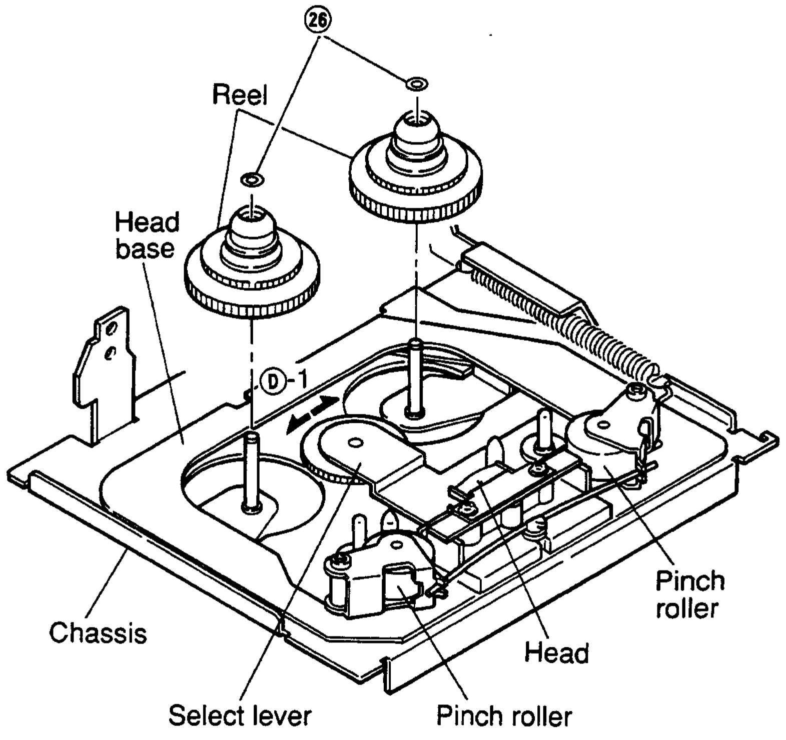


Figure 19

e. Replacement of the pinch rollers

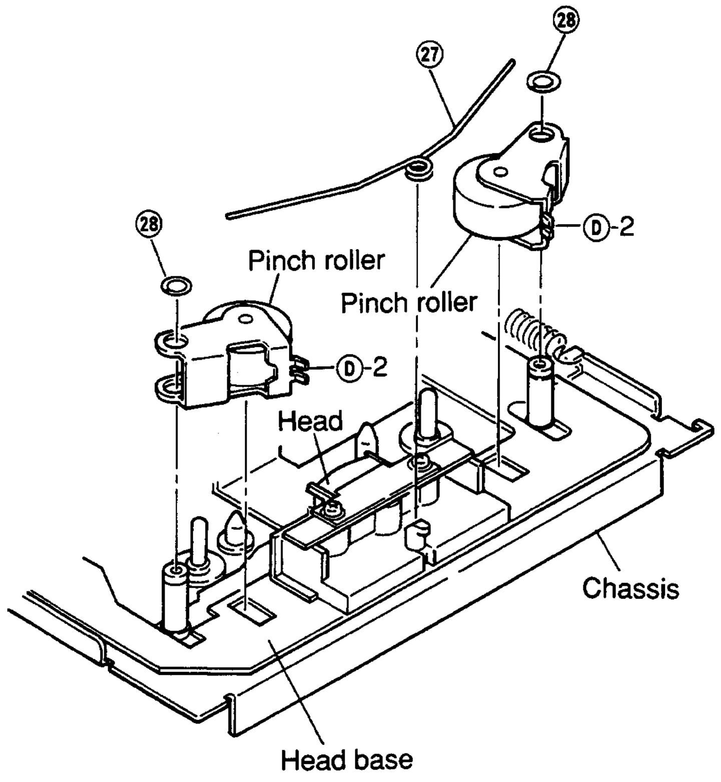
(1) Remove pinch roller spring ㉗ as shown in Figure 20.
(2) Remove M3.1 two lock washers ㉘ and remove the pinch roller as shown in Figure 20.
(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

f. Replacement of the head

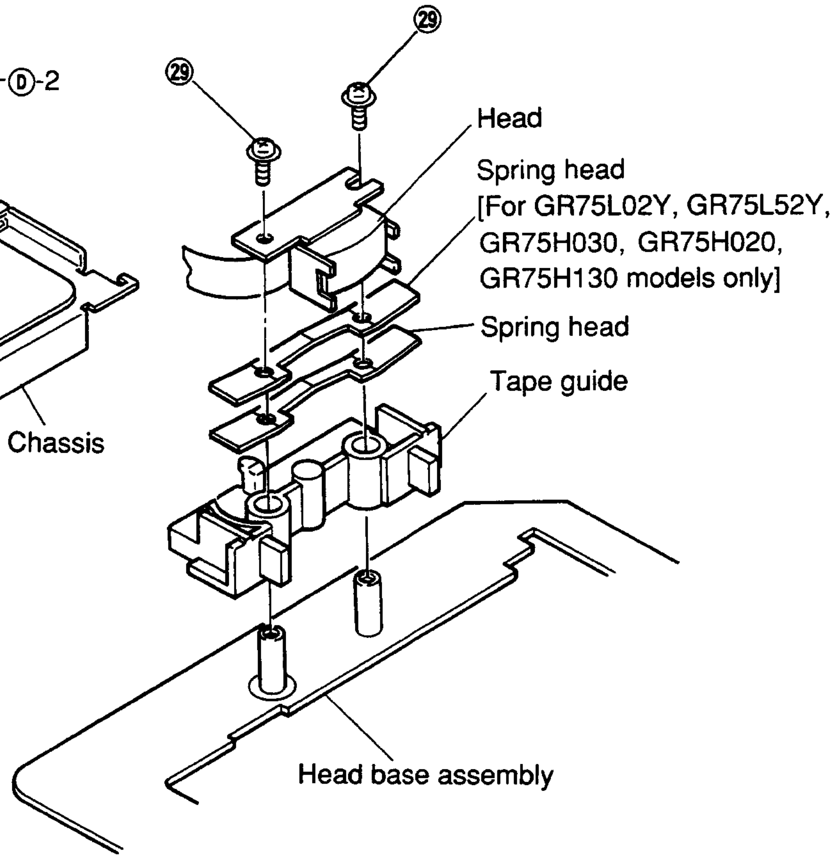
(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.
(2) Remove solder ㉚ and remove the head from the head P.C. board as shown in Figure 22.
(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board. Make sure that the head P.C. board is not lifted.
2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.



㉘
㉗
Ⓓ-2
㉘
Pinch roller
Pinch roller
Ⓓ-2
Head
Chassis
Head base

Figure 20



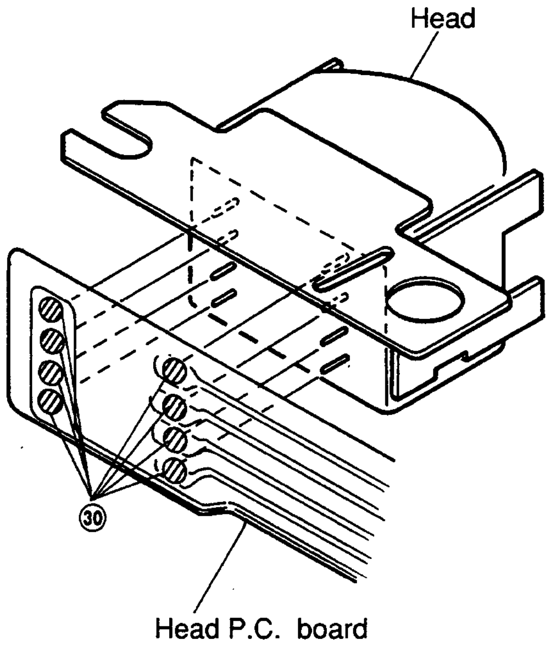
㉙
㉙
Head
Spring head
[For GR75L02Y, GR75L52Y, GR75H030, GR75H020, GR75H130 models only]
Spring head
Tape guide
Head base assembly

Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.
① Place the height adjustment gauge (AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.
② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

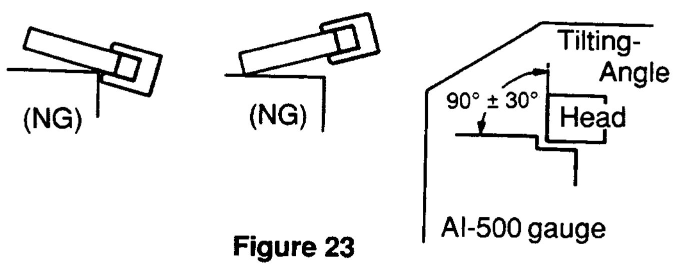
Note: If you do not have a height gauge like described in (4)-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.



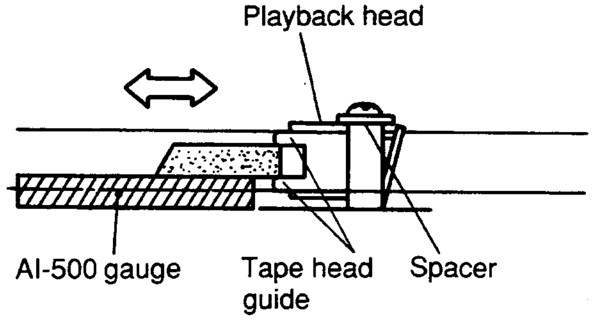
Head
㉚
Head P.C. board

Figure 22



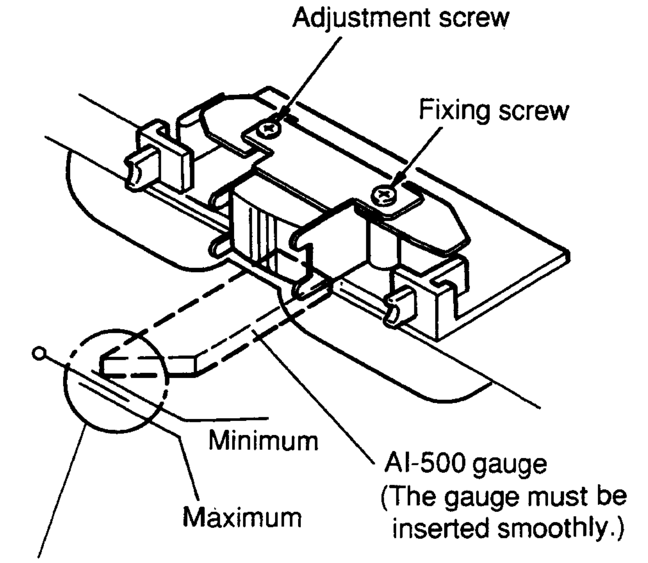
(NG)
(NG)
Tilting-Angle
90° ± 30°
Head
AI-500 gauge

Figure 23



Playback head
AI-500 gauge
Tape head guide
Spacer

Figure 24



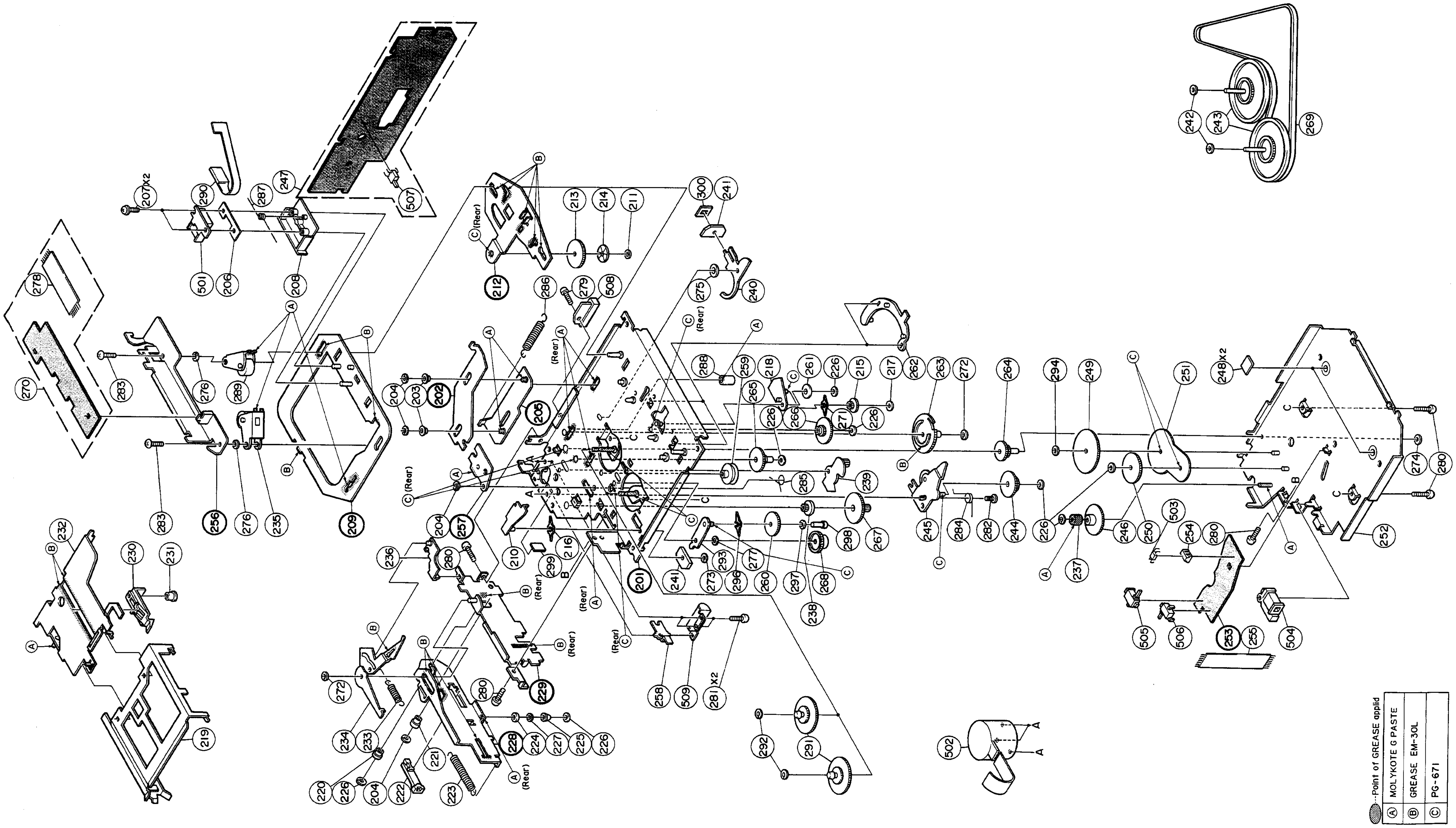
Adjustment screw
Fixing screw
Minimum
Maximum
AI-500 gauge
(The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (GR75E Series) (1/4)

- **For GR75E010/01A/020 Models**


207X2
290
287
247
507
501
206
208
278
270
283
276
289
235
256
209
212
213
214
211
300
241
240
275
286
279
508
204
203
202
205
288
259
218
261
226
215
217
262
263
272
264
294
249
251
248X2
265
266
271
239
285
245
284
282
244
246
250
503
254
280
252
274
237
267
298
268
238
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296
293
273
201
216
299
210
257
236
232
230
231
219
229
234
233
220
222
221
223
228
224
227
225
258
509
281X2
292
291
502
505
506
253
255
504
242
243
269
A
B
C
(Rear)

▨	...Point of GREASE applid
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75E Series) (1/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A31756W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy., Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A30480W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P35	Washer, Lock(M1.7)
	218	3-E	01A30824W01	Assy., Riv Lever Reverse
●	219	4-B	07B40283W01	Holder, Cassette
■	219	4-B	07B40283W01	Holder, Cassette
▲	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject A
	225	4-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy.,Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A10148W01	Assy., Riv Eject Arm A
	235	3-B	01B30863W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A12975W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A40725W01	Lever, Play Sol
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer Polyslider (M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch A

Symbol No.		IN-dex	Part No.	Description
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V11500W18	Assy., GR Control P.C. Board
	248	3-G	43A41656W01	Spacer, UHMW
	249	3-F	44A11063W01	Gear, Bottom A
	250	3-F	44A11064W01	Gear, Bottom B
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B30484W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-D	44A10379W01	Gear, Pause Idler B
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
●	270	3-A	01V14700W68	Assy., GR Audio P.C. Board
■	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
▲	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
	271	3-E	41A30475W01	Spring, Clutch
	272		04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276		04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P37	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F53	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head

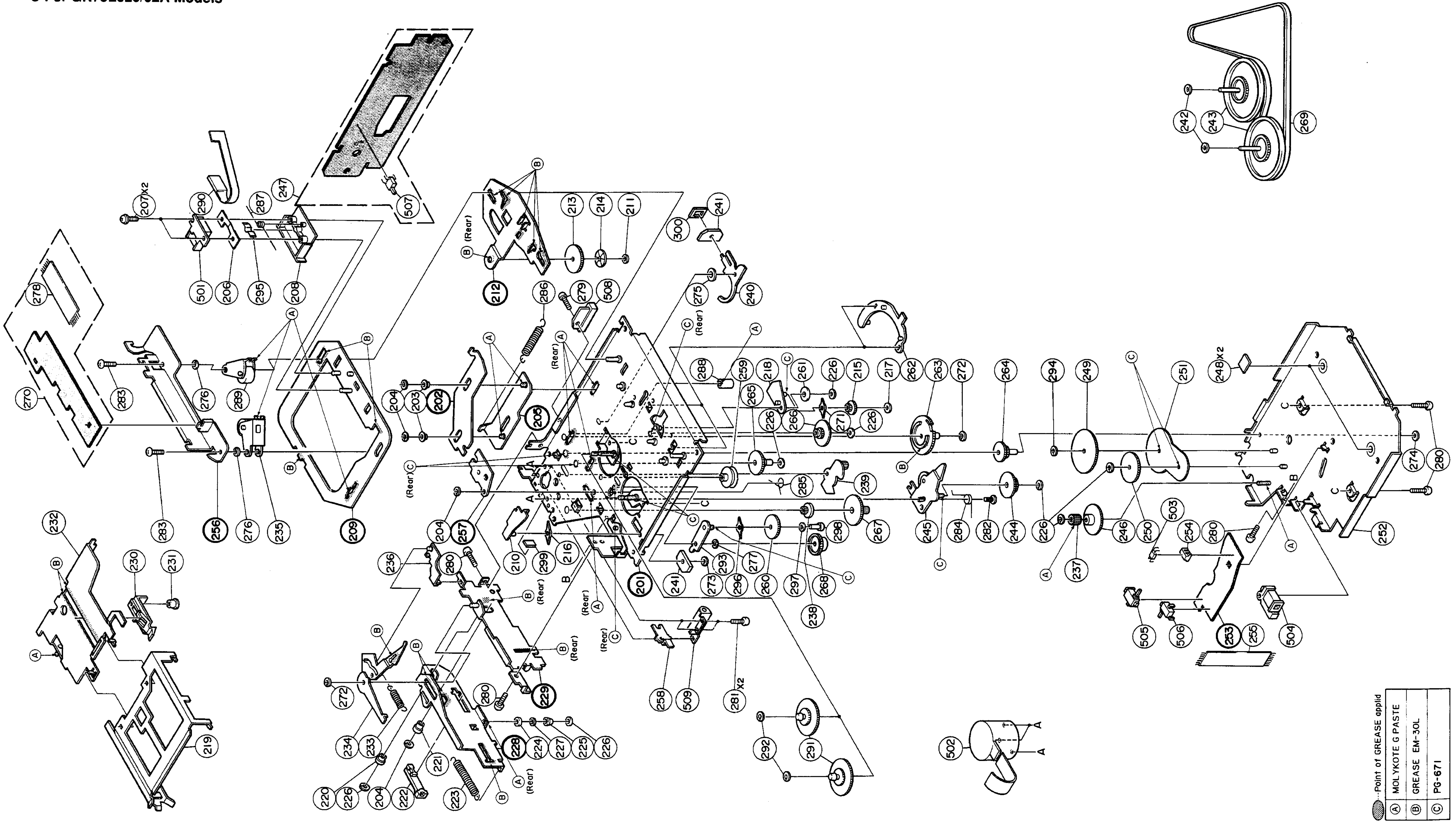
Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Symbol No.		IN-dex	Part No.	Description
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B30863W01	Assy., Pinch Roller
	290	2-B	84T25151W01	Head P.C. Board
	291	4-E	01T35403W01	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
	293	4-D	01A30161W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer Lock(M1.2)
	296	4-D	41A40910W01	Spring, Clutch
	297	4-E	43A41543W01	Washer, Som(M1.2)
	298	3-E	47A41458W01	Pin, Take Up
	299	4-C	43A40388W01	Spacer, Polyslider
	300	2-D	43A41744W01	Lock, Solenoid
Miscellaneous				
●	501	2-B	88T15971W01	Head
■	501	2-B	88T10373W01	Head
▲	501	2-B	88T10373W01	Head
	502	4-E	01V11500W64	Assy., Motor(Main, 13.2V-80mA)
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Exploded View (GR75L Series) (2/4)

- **For GR75L020/02A Models**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▨	…Point of GREASE applid
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

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A B C D E F G H

Cassette Deck Assembly Parts List (GR75E Series) (2/4)

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216	3-E	41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
219	4-B	07B40283W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-E	45A40725W01	Lever, Play Sol
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
247	2-B	01V23700W03	Assy., GR Control P.C. Board

Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Note : The parts without parts list are not supplied.

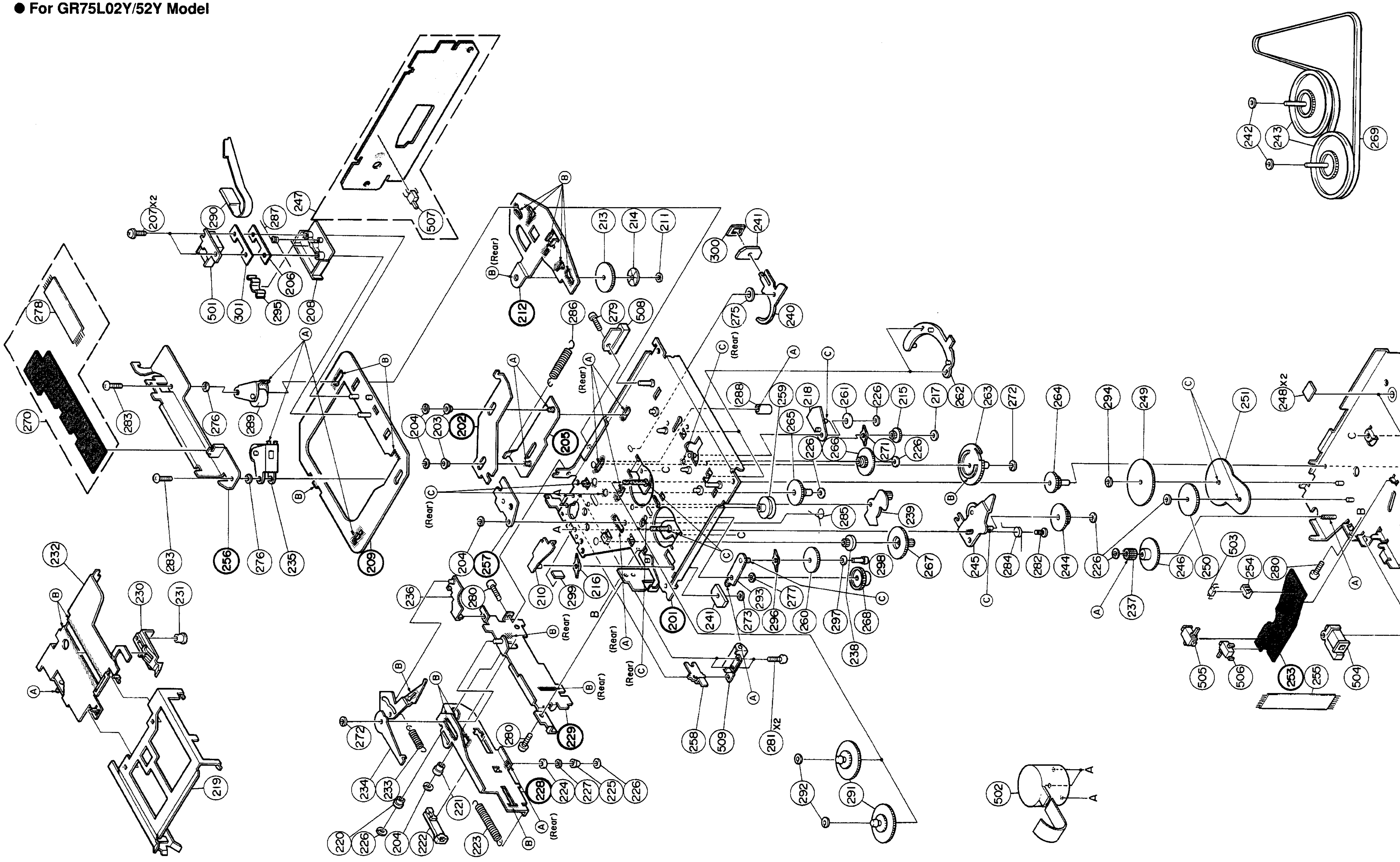
Symbol No.	IN-dex	Part No.	Description
248	3-G	43A41656W01	Spacer, UHMW
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
270	3-A	01V14700W68	Assy., GR Audio P.C. Board
271	3-E	41A30475W01	Spring, Clutch
272	3-F	04B41345P15	Washer, Lock(M1.2)
273	4-D	04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276		04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T25151W01	Head P.C. Board

Symbol No.	IN-dex	Part No.	Description
291	4-E	01T35403W02	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	3-D	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid
Miscellaneous			
501	2-B	88T15971W01	Head
◆ 502	4-E	01V23900W60	Assy., Motor(13.2V-105mA)
○ 502	4-E	01V43400W37	Assy., Motor(13.2V-88mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Exploded View (GR-Y Series) (3/4)

- **For GR75L02Y/52Y Model**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Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR-Y Series) (3/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roll. Sub Head
	204		04B41345P01	Washer. Lock(M1.2)
	206	2-B	41A31756W01	Spring. Head
	207	2-B	03S40019G03	Screw. F-Locks(M2x4)
	208	2-B	43B12545W01	Tape. Guide
	210	4-C	01A10206W01	Assy.. Riv Lever R/F Sol.
	211	2-D	04B41345P29	Washer. Lock(M2.6)
	213	2-D	44A10295W01	Gear. Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A30480W01	Gear. Planet
	216		41A10097W02	Spring. Clutch
	217	3-E	04B41345P35	Washer. Lock(M1.7)
	218	3-E	01A30824W01	Assy.. Riv Lever Reverse
	219	4-B	07B40283W01	Holder. Cassette
	220	5-B	43A12583W01	Roller. Eject
	221	5-C	43A63281F01	Roller. Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring. GR(Rack)
	224	4-C	43A10121W01	Roller. Eject(A)
	225	4-D	43A10360W01	Roller. Eject(B)
	226		04B41345P11	Washer. Lock(M1.2)
	227	4-D	43A12377W01	Roller. Eject(C)
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft. Slider
	232	4-A	01A10212W01	Assy.. Riv Plate Base
	233	4-C	41B10386W01	Spring. Eject Arm
	234	4-B	01A21754W01	Assy.. Riv Eject Arm(A)
	235	3-B	01B30863W02	Assy.. Pinch Roller
	236	4-C	45A10087W01	Lever. Pack In SW.
	237	4-F	44A20314W01	Pinion. Eject
	238	4-E	44A13617W01	Gear. Motor Idler(B)
	239	3-E	01A10201W02	Assy.. Riv Lever Pause
	240	2-D	45A40725W01	Lever. Play Sol.
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer. Polyslider (M2.1)
	243	1-G	01A10368W01	Assy.. Flywheel
	244	3-F	44A10141W01	Gear. Eject Idler
	245	3-E	01A10205W02	Assy.. Riv Lever Clutch(A)
	246	3-F	44A10145W01	Gear. Eject
☆	247	2-B	01V23700W03	Assy.. GR Control P.C. Board
◇	247		01V44200W74	Assy.. GR Control P.C. Board
	248	3-G	43A41656W01	Spacer. UHMW
	249	3-F	44A11063W01	Gear. Bottom(A)
	250	3-F	44A11064W01	Gear. Bottom(B)
	251	3-G	34A11122W02	Washer. GR
	252	3-H	01A10210W02	Assy.. Riv. Cover Bottom
	254	3-G	15B11065W01	Guide. Photo
	255	4-G	30T15126W01	Wire. PC Sensor(7P)
	258	4-D	45A10101W01	Lever. Eject Sol.
	259	3-D	49A10131W01	Pulley. Idler
	260	4-E	44A10133W01	Gear. Take Up
	261	3-E	44A10134W01	Gear. Sun
	262	3-E	44B10135W01	Gear. Fix
	263	3-E	44B21670W01	Gear. Pause
	264	3-F	44A10137W01	Gear. Pause Idler(A)
	265	3-D	44A10379W01	Gear. Pause Idler(B)
	266	3-E	44A10138W01	Gear. Reverse Idler
	267	3-E	44A10139W01	Gear. Motor Idler
	268	4-E	44A11062W01	Gear. Reel Idler
	269	1-G	42A10380W01	Belt. GR
	270	3-A	01V33300W03	Assy.. GR Audio P.C. Board
	271	3-E	41A30475W01	Spring. Clutch
	272	3-F	04B41345P15	Washer. Lock(M1.2)
	273		04B41345P02	Washer. Lock(M1.7)
	274	3-H	04B41345P17	Washer. Lock(M1)
	275	2-D	04B41345P30	Washer. Lock(M3.1)
	276	3-B	04B41345P32	Washer. Lock(M3.1)
	277	4-E	04B41345P37	Washer. Lock(M2.1)
	278	2-A	30T15126W02	Wire. PC Joint 7P
	279	2-D	03S44205G78	Screw. Pan(M2x6)
	280		03S44205G30	Screw. Pan(M2.6x4)
	281	4-D	03S72235F53	Screw. Pan(M2x3.3)
	282	3-F	03A12132W02	Screw. Eject Clutch (M2x2.3)
	283		03S43997P64	Screw. Pan(M1.7x3)
	284	3-F	41A10384W01	Spring. Eject Clutch
	285	3-E	41A10385W01	Spring. Cas. Push
	286	2-C	41B10386W02	Spring. Sub Head
	287	2-B	41A10387W01	Spring. Pinch Roller
	288	3-D	43A12719W01	Roller. Pause
	289	3-B	01B30863W01	Assy.. Pinch Roller
	290	2-B	84T35271W01	Head P.C. Board

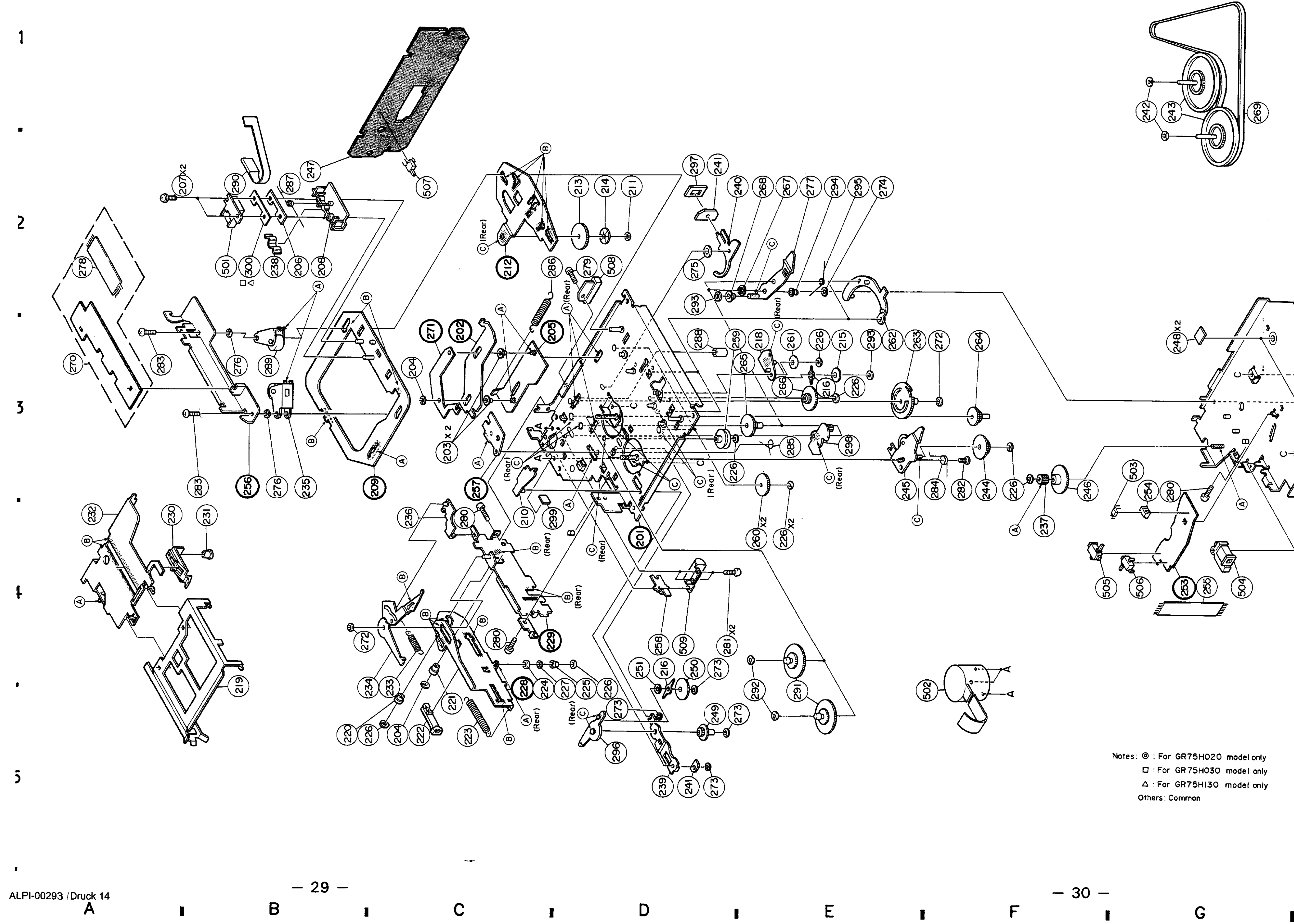
Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

Symbol No.		IN-dex	Part No.	Description
	291	4-E	01T35403W02	Assy.. Reel
	292	4-E	04B41345P12	Washer. Lock(M1.7)
	293	4-D	01A30161W01	Assy.. Riv Lever Take Up
	294	3-F	04B41345P34	Washer. Lock(M1.2)
	295	2-B	26A20537W01	Shield. Plate
	296	4-D	41A40910W01	Spring. Clutch
	297	4-E	43A41543W01	Washer. Som(M1.2)
	298	3-E	47A41458W01	Pin. Take Up
	299	3-C	43A40388W01	Spacer. Polyslider
	300	2-D	43A41744W01	Lock. Solenoid
	301	2-B	41A41416W01	Spring. Head
Miscellaneous				
	501	2-B	88T15971W01	Head
☆	502	4-E	01V23900W60	Assy.. Motor(13.2V-105mA)
◇	502	4-E	01V44200W73	Assy.. Motor(13.2V-80mA)
	503	3-G	51T15144W01	Sensor. Photo
	504	4-G	01T10371W01	R/F Sol. Assy
	505	4-F	40T15382W01	SW.. Detector (Pack Down)
	506	4-G	40T15382W01	SW.. Detector (Metal)
	507	2-C	40T15222W01	SW.. Detector (Pack In)
	508	2-D	01T15249W01	Assy.. Play Solenoid
	509	4-D	01T10369W02	Assy.. Eject Solenoid

Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

Exploded View (GR75H Series) (4/4)

● For GR75H030/020/130 Model


1
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C
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287
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300
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206
208
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256
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235
283
209
212
C (Rear)
B
213
214
211
286
279
508
271
202
205
204
203 X 2
257
210
299
201
A (Rear)
C (Rear)
297
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268
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251
216
250
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249
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239
241
273
502
(Rear)

Notes: ◎ : For GR75H020 model only
□ : For GR75H030 model only
△ : For GR75H130 model only
Others : Common

▨ ...Point of GREASE applid	
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75H Series) (4/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A31453W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A31756W01	Spring, Head
	207	2-A	03A38021W01	Screw, Flange(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A30462W01	Assy., Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A30480W01	Gear, Planet
	216		41A30475W01	Spring, Clutch
	218	3-E	01A30824W01	Assy., Riv Lever Reverse
◎	219	4-B	07B40283W01	Holder, Cassette
□	219	4-B	07B40283W01	Holder, Cassette
△	219	4-B	07B40012W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
◎	223	5-C	41B10386W03	Spring, GR(Rack)
□	223	5-C	41B10386W03	Spring, GR(Rack)
△	223	5-C	41B10386W04	Spring, GR(Rack)
	224	5-C	43A10121W01	Roller, Eject A
	225	5-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	5-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
◎	232	4-A	01A10212W01	Assy., Riv Plate Base
□	232	4-A	01A10212W01	Assy., Riv Plate Base
△	232	4-A	01A40024W01	Assy., Riv Plate Base
◎	233	5-C	41B10386W01	Spring, Eject Arm
□	233	5-C	41B10386W01	Spring, Eject Arm
△	233	5-C	41B63283F11	Spring
◎	234	5-C	01A30883W01	Assy., Riv Eject Arm B
□	234	5-C	01A30883W01	Assy., Riv Eject Arm B
△	234	5-C	01A40021W01	Assy., Riv Eject Arm D
	235	3-B	01B30863W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A20314W01	Pinion, Eject
	238	2-B	26A20537W01	Shield, plate
	239	5-D	01A40881W01	Assy., Riv RF Link
	240	2-D	45A40725W01	Lever, Play Sol.
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
	243	1-G	01A30488W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch A
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V33500W45	Assy., GR Control P.C. Board
	248	3-G	43A41656W01	Spacer, UHMW
	249	5-D	44A30481W01	Gear, RF Idler
	250	4-D	44A30483W01	Gear, RF
	251	4-D	04S40075G58	Washer, Polyslider(M2.1)
	252	3-H	01A30463W01	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A30476W01	Pulley, Idler
	260	4-E	44A30482W01	Gear, Take Up
	261	3-E	44A30478W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B30484W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-E	44A30486W01	Gear, Pause Idler B
	266	3-E	44A30479W01	Gear, Reverse Idler
	267	2-E	44A30485W01	Gear, Motor Idler
	268	2-E	44A30487W01	Gear, Motor Clutch
	269	1-G	42A31850W01	Belt, GR
◎	270	3-A	01V43400W38	Assy., GR Audio P.C. Board
□	270	3-A	01V33300W03	Assy., GR Audio P.C. Board
△	270	3-A	01V33300W03	Assy., GR Audio P.C. Board
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273		04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	2-E	01A30464W01	Assy., Riv Play Clutch
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F53	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch(M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B30863W01	Assy., Pinch Roller
◎	290	2-B	84T25151W01	Head P.C. Board

Notes: ◎ ; For GR75H020 model only □ ; For GR75H030 model only
△ ; For GR75H130 model only Others ; Common

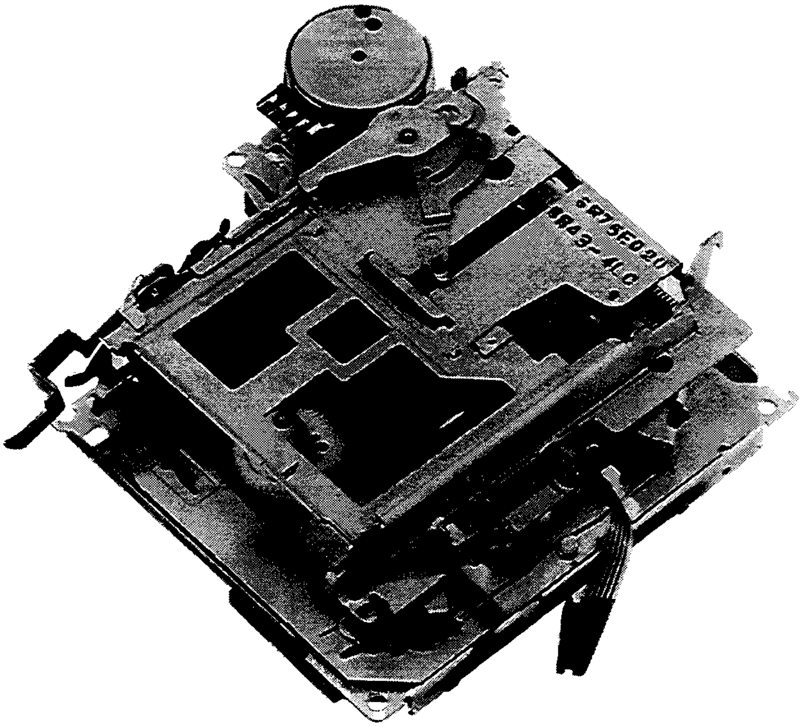
Symbol No.		IN-dex	Part No.	Description
□	290	2-B	84T35271W01	Head P.C. Board
△	290	2-B	84T35271W01	Head P.C. Board
	291	5-E	01T35403W01	Assy., Reel
	292	5-E	04B41345P12	Washer, Lock(M1.7)
	293	2-D	04B41345P35	Washer, Lock(M1.7)
	294	2-E	43A30827W01	Spacer, Motor Idler
	295	2-E	41A30490W01	Spring, Play Clutch
	296	5-D	01A40882W01	Assy., Riv Lever RF
	297	2-D	34A48030W01	Washer, Solenoid
	298	3-E	01A10201W02	Assy, Riv Lever Pause
	299	4-C	43A40388W01	Spacer, Polyslider
□	300	2-B	41A41416W01	Spring, Head
△	300	2-B	41A41416W01	Spring, Head
Miscellaneous				
◎	501	2-B	88T15971W01	Head
□	501	2-B	88T35406W01	Head
△	501	2-B	88T35406W01	Head
	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes: ◎ ; For GR75H020 model only □ ; For GR75H030 model only
△ ; For GR75H130 model only Others ; Common

ALPINE SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (III)


SR75E020
8843-4LC

GR/GR-Y SERIES

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List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY		
			GR75E Series	GR75L Series	GR-Y Series
1	(M1.2 x 3.5 x 0.25)	04B41345P01	8	7	6
2	(M1.7 x 3.5 x 0.25)	04B41345P02	1	1	2
3	(M2.1 x 5 x 0.25)	04B41345P06	1	1	0
4	(M1.2 x 2.5 x 0.25)	04B41345P11	7	7	8
5	(M1.7 x 3.5 x 0.35)	04B41345P12	2	2	2
6	(M1.2 x 3.5 x 0.35)	04B41345P15	1	1	1
7	(M1 x 2.5 x 0.25)	04B41345P17	1	1	1
8	(M2.6 x 5 x 0.25)	04B41345P29	1	1	0
9	(M3.1 x 8 x 0.05)	04B41345P30	1	1	1
10	(M1.7 x 3 x 0.25)	04B41345P31	1	1	1
11	(M3.1 x 5 x 0.35)	04B41345P32	2	2	2
12	(M1.2 x 2.5 x 0.3)	04B41345P34	1	1	0
13	(M2.1 x 4 x 0.25)	04B41345P37	0	0	1
14	(M2.6 x 4.7 x 0.25)	04B41345P38	0	0	1

List of Usable Oil

1) Molykote E paste
2) Grease EM-30L
3) Grease FLOIL 425A

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   AI-500 (Part No. AI-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.
(2) Remove M1 lock washer ① as shown in Figure 1.
(3) Remove three screws ② as shown in Figure 1.
(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.
(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.
(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.
(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.
(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.
(9) Turn the mechanism around as shown in Figure 3.
(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.
(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)
(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly in the direction Ⓐ-11.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figures 4 and 5.)
(13) Fix the screws and the lock washer that have been removed.

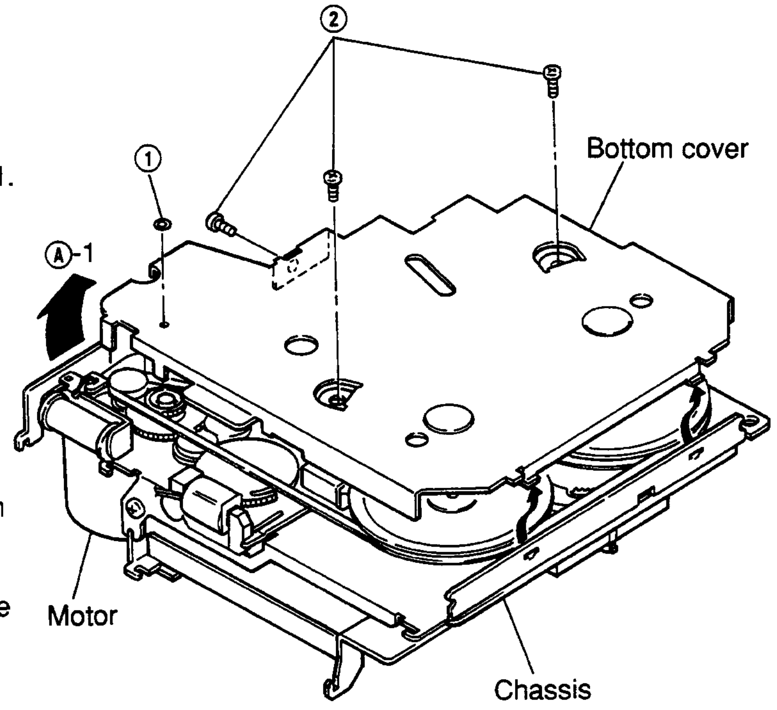


Figure 1

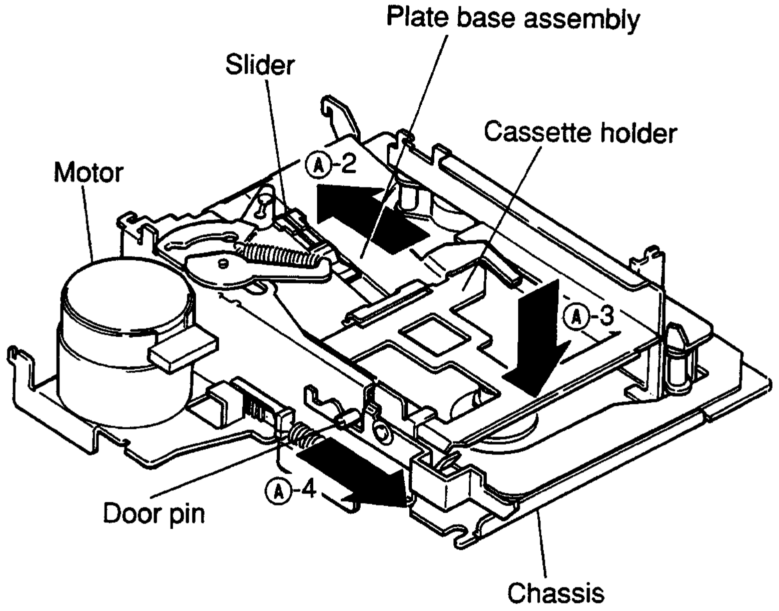


Figure 2

(14) Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg.cm.

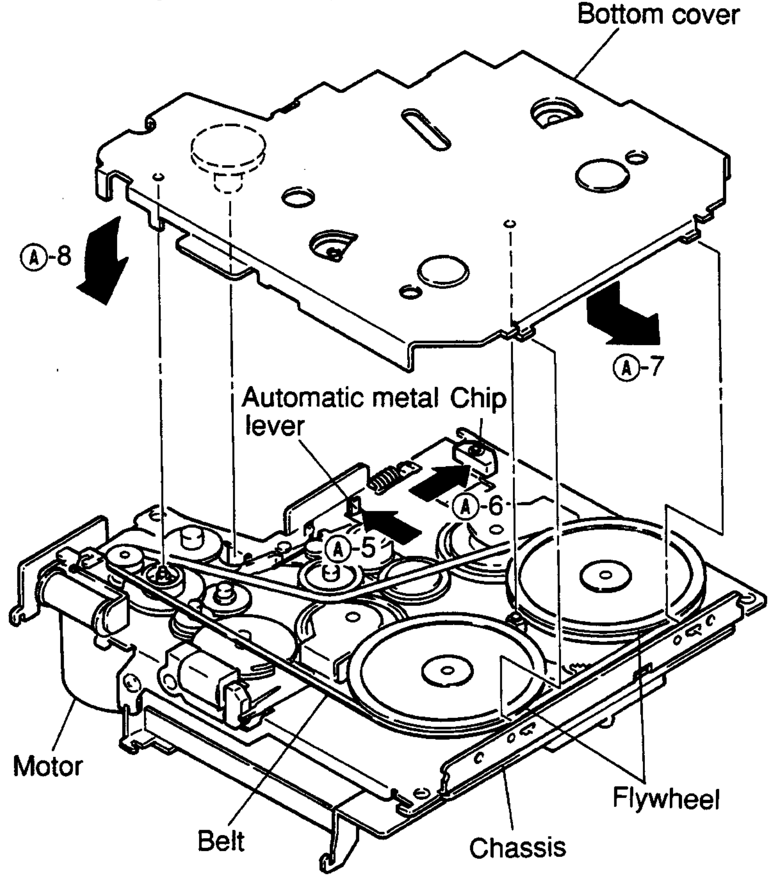


Figure 3

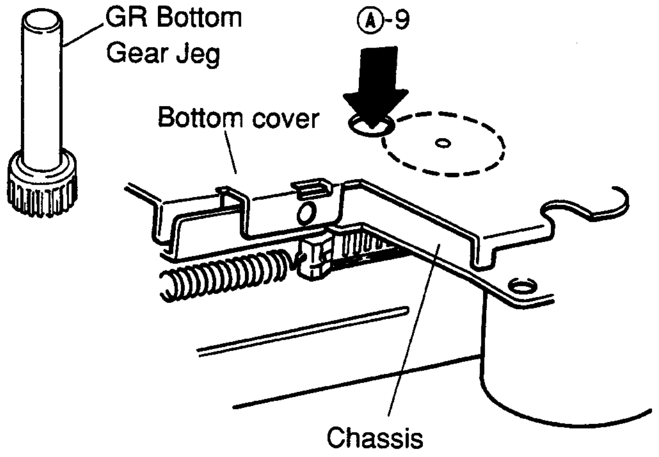


Figure 4

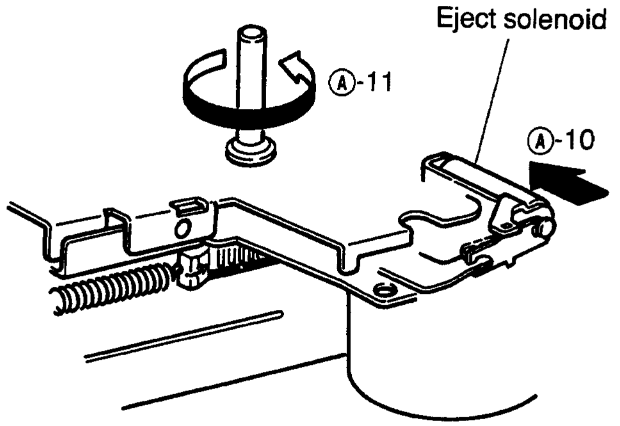


Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear
(1) Remove M1.2 lock washer ③ as shown in Figure 6.
(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.
(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid
(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.
(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

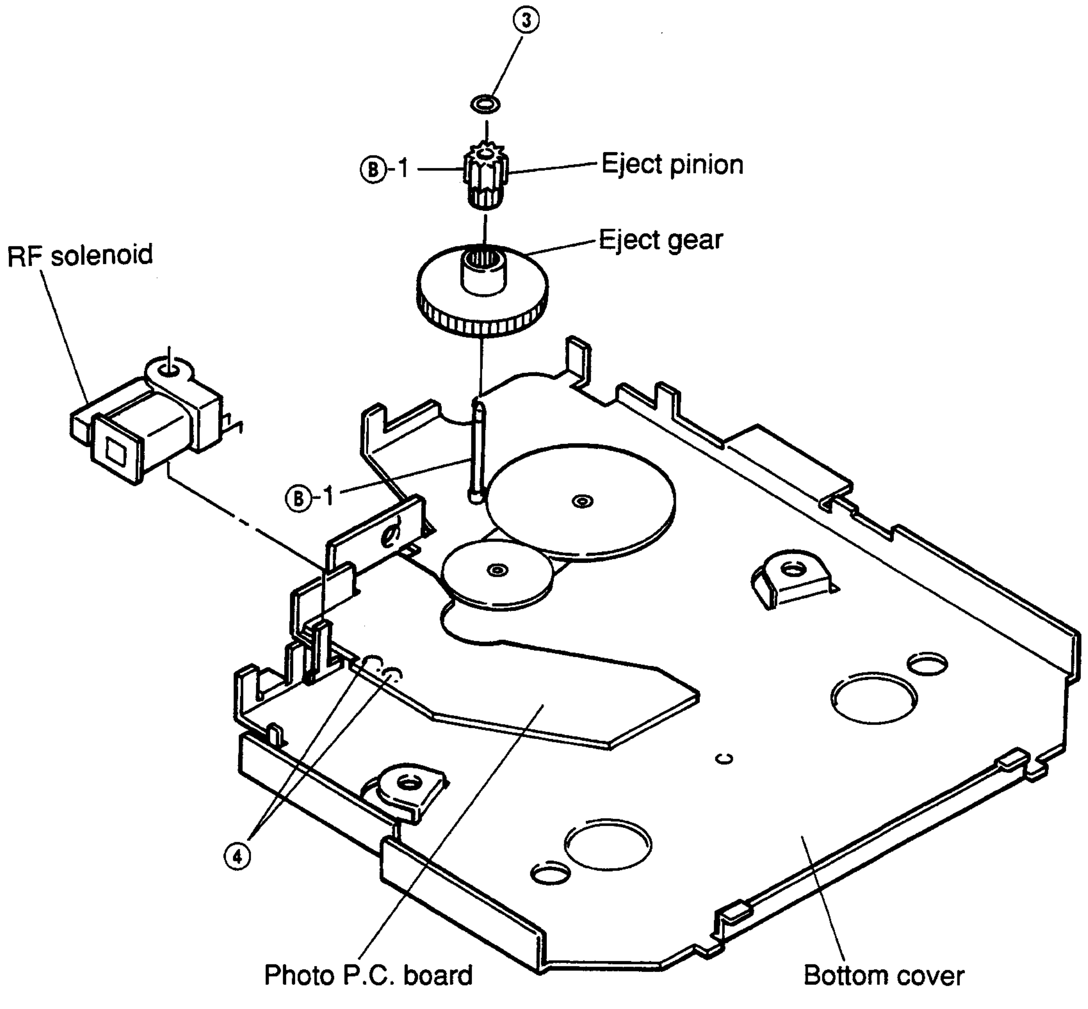


Figure 6

c. Replacement of the photo sensor
(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo P.C. board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked Ⓑ-2 as shown in Figure 7.
(4) Insert the photo guide into the P.C. board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch
(Automatic metal pack-in)
(1) Remove 4 solders ⑥ with which the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo P.C. board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

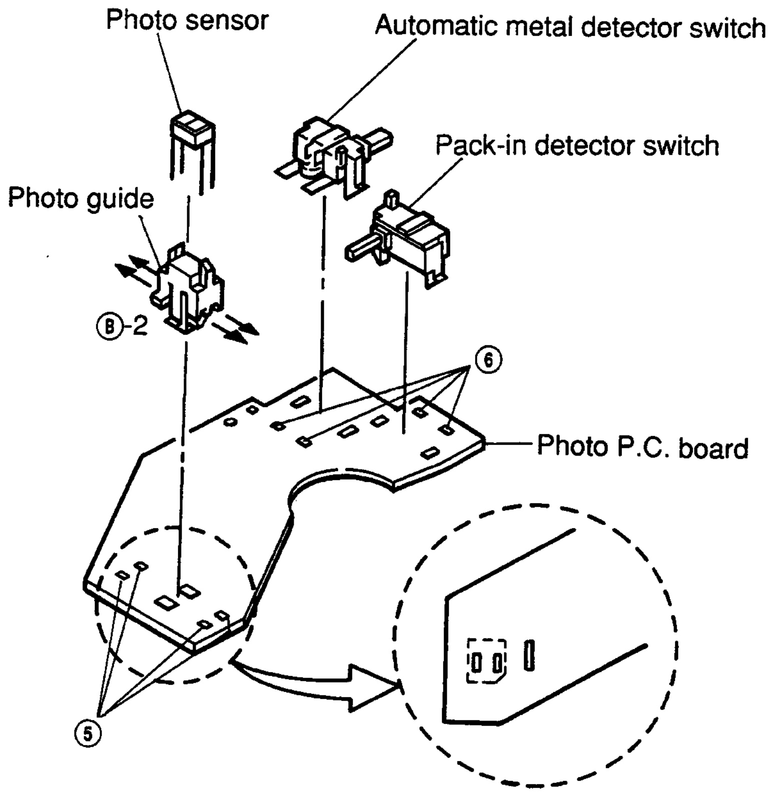


Figure 7

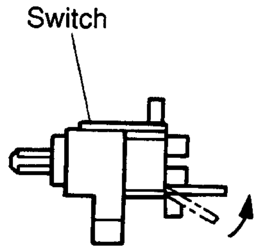


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.

(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

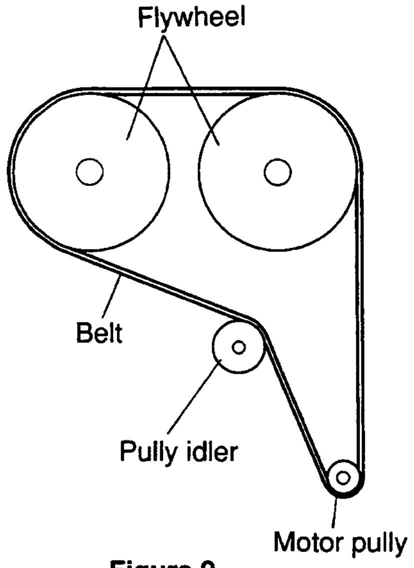

Flywheel
Belt
Pully idler
Motor pully

Figure 9

b. Replacement of the motor

(1) After removing the belt, remove spring ⑦ as shown in Figure 10.

(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control P.C. board as shown in Figure 11.

(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)

(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

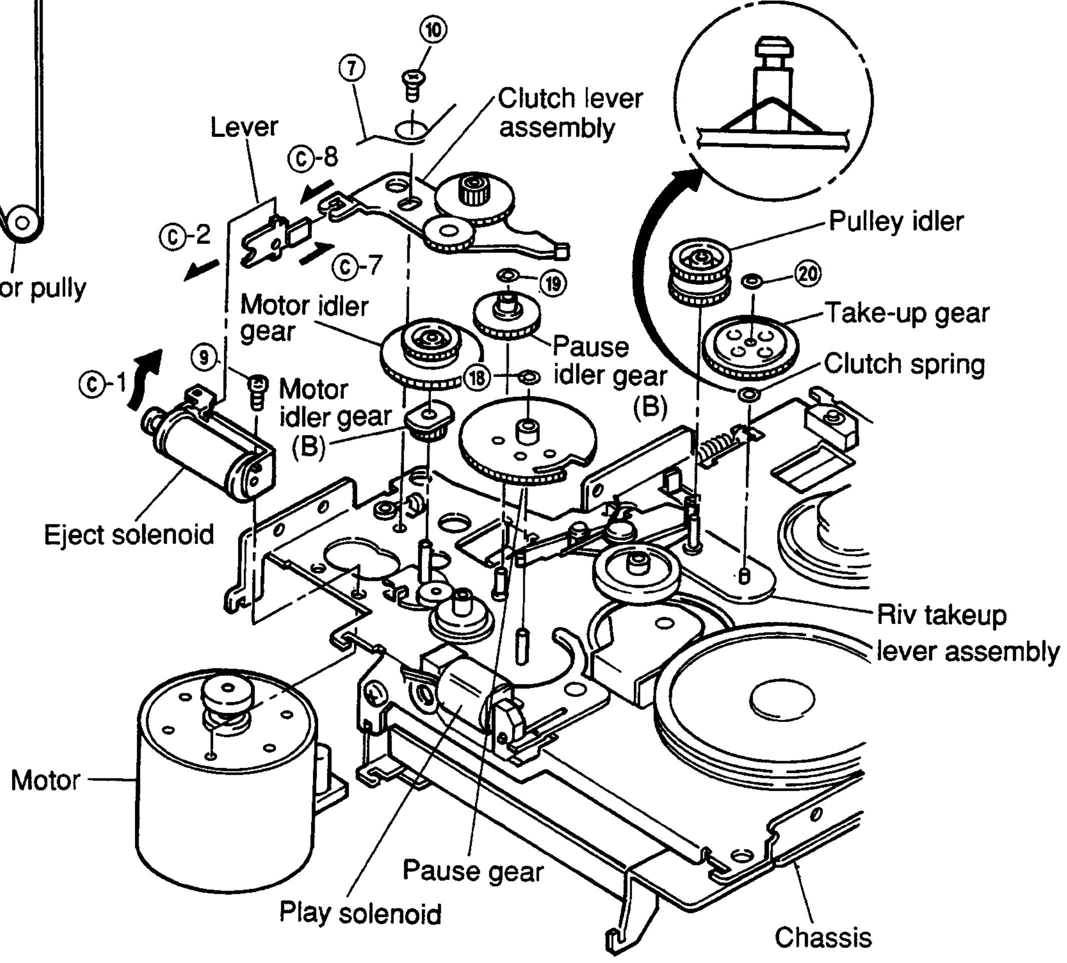

⑩
⑦
Clutch lever assembly
Lever
Ⓒ-8
Ⓒ-2
Ⓒ-7
Pulley idler
⑲
⑳
Motor idler gear
Take-up gear
Pause idler gear (B)
Clutch spring
⑨
⑱
Ⓒ-1
Motor idler gear (B)
Eject solenoid
Riv takeup lever assembly
Motor
Pause gear
Play solenoid
Chassis

Figure 10

c. Replacement of the flywheels

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

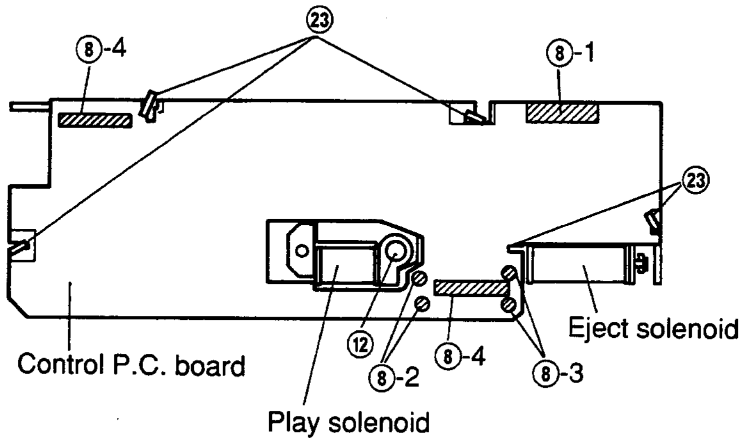
d. Replacement of the play solenoid

(1) Remove the two solders ⑧-2 as shown in Figure 11.

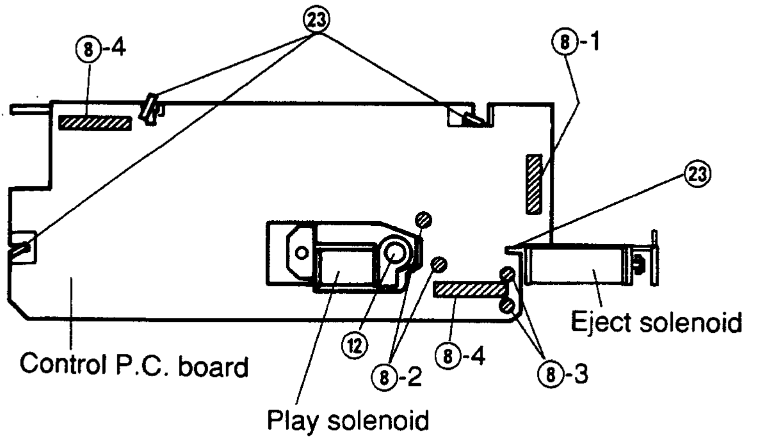
(2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.

(3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.


㉓
⑧-4
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

[For GR75E020, GR75E010, GR75E01A, GR75E01C models]


㉓
⑧-4
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

[For GR75L020, GR75L010 models]

Figure 11

e. Replacement of the eject solenoid

(1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)

(2) Remove screw ⑨ and remove the play solenoid as shown in Figure 10.

(3) Align position Ⓒ-1 of the new solenoid with position Ⓒ-2 of the lever and fasten the screw as shown in Figure 10.

(4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm.
As the solder wires are not insulated, do not let them cross each other.

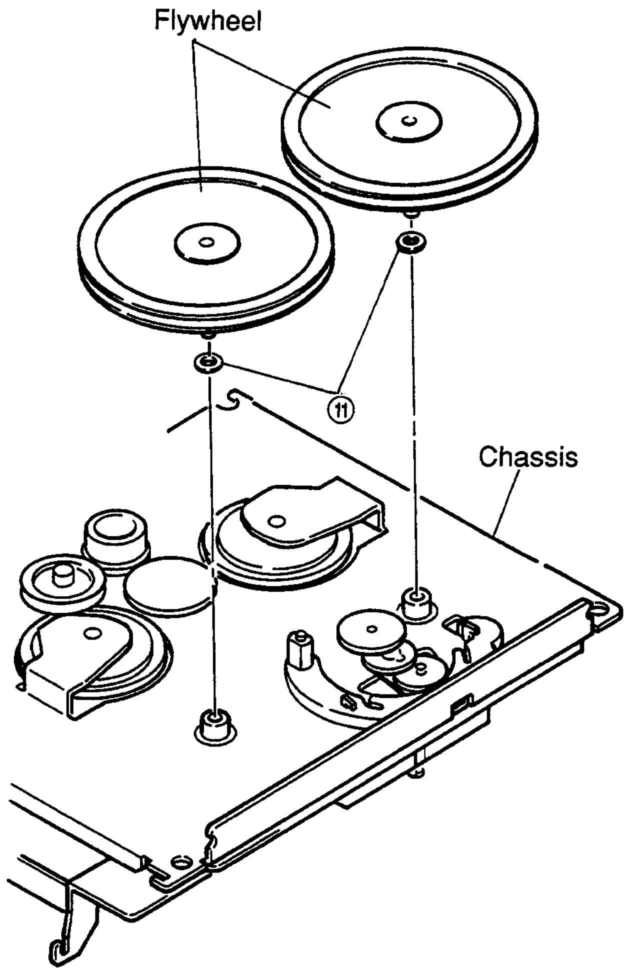

Flywheel
⑪
Chassis

Figure 12

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

(1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

(1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

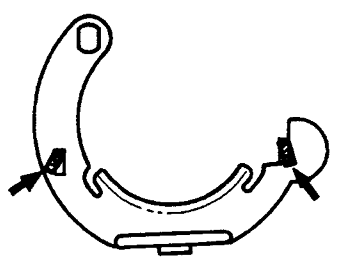
(1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ⓒ-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.
(2) Insert the section ⓒ-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

(1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.
(2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.
(3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:
After mounting all parts, check if the reverse lever moves in the directions marked ⓒ-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend the claws ⑮ into the form of as shown in the Figure.



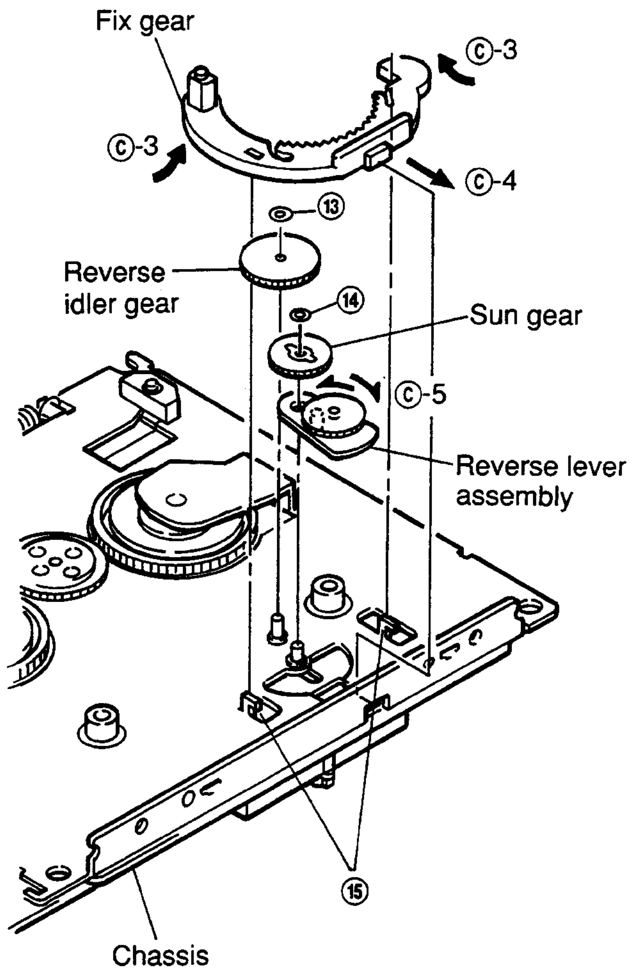


Figure 13

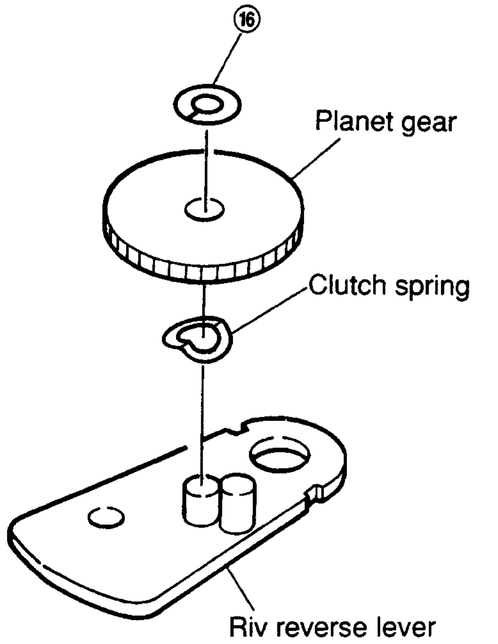
(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.
(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.
(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (FLOIL 425A) to the position ⓒ-6 as shown in Figure 15. Align the position ⓒ-7 with the position ⓒ-8 and mount the clutch lever as shown in Figures 10 and 15.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear following the removal steps in the reverse order.



[Disassembly Reverse Lever Assembly]

Figure 14

(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the riv take-up lever assembly as shown in Figure 10.
(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:
Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

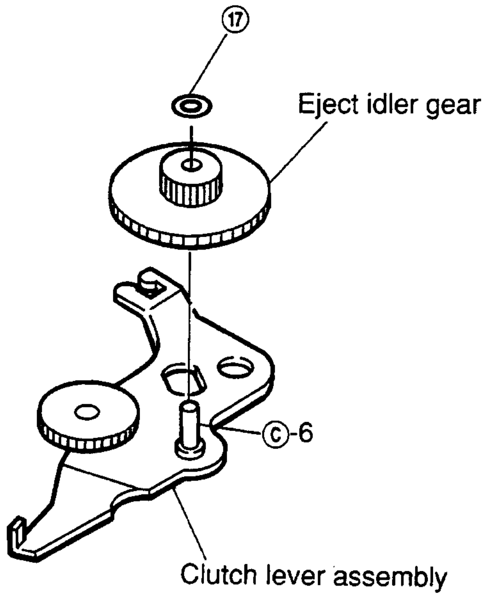


Figure 15

4. Replacement of the parts mounted on the front of the chassis

a. Replacement of the audio P.C. board

(1) Remove two solders ㉑ and remove the parallel wire (7P) and the head P.C. board as shown in Figure 16.
(2) Adjust the two claws ㉒ to the rectangular holes on the P.C. board and remove the P.C. board as shown in Figure 16.
(3) After replacement, mount the new P.C. board following the removal steps in the reverse order.

Note: The head P.C. board and the parallel wire are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board.

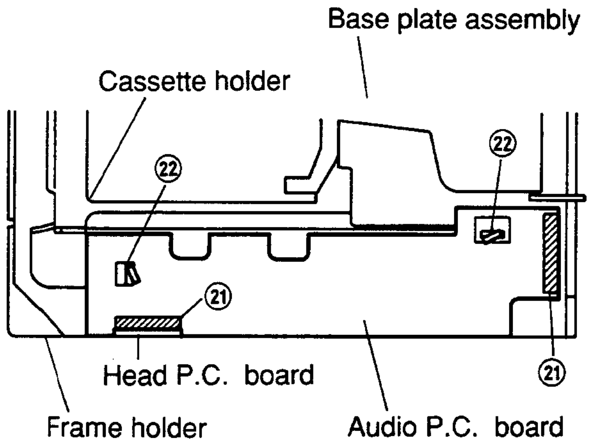


Figure 16

b. Replacement of the control P.C. board

(1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.
(2) Remove five claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75E020, GR75E010, GR75E01A, GR75E01C models]
Remove four claws ㉓ and remove the P.C. board as shown in Figure 11.
[For GR75L020, GR75L010 models]
(3) After replacing the old P.C. board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

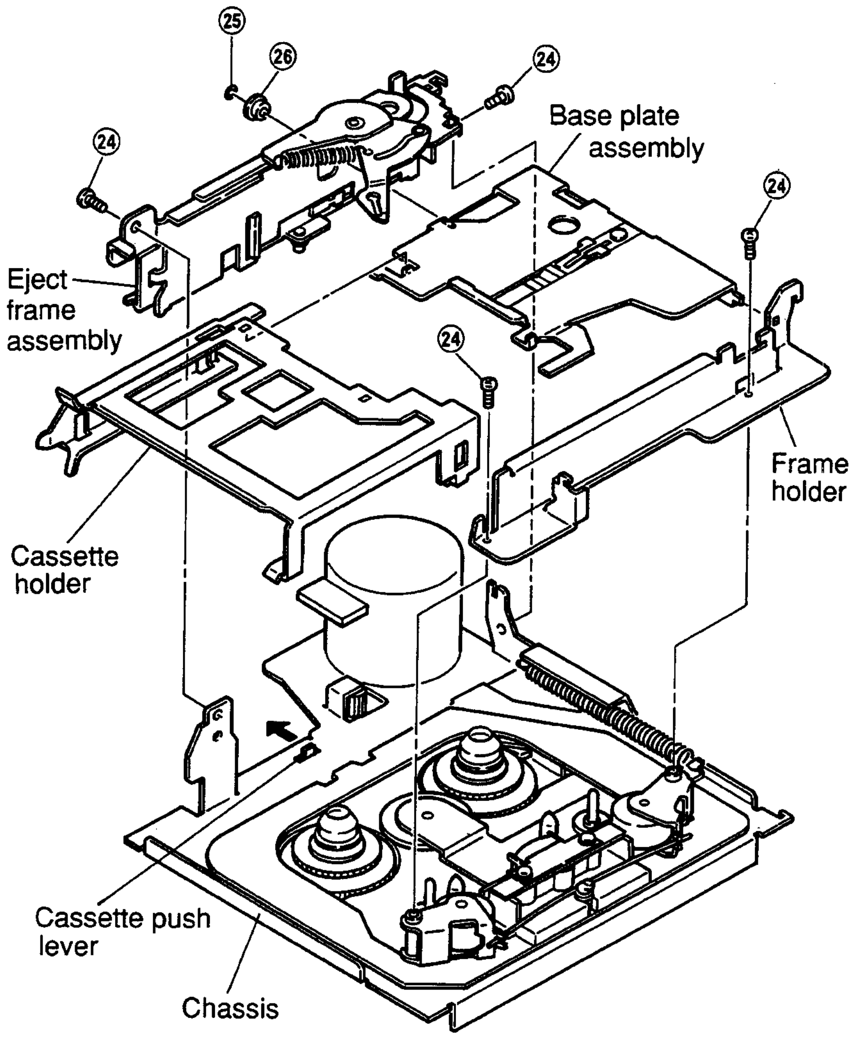


Figure 17

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.
(2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.
(3) Remount them following the removal steps in the reverse order.

Notes: 1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).
2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.
3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.
4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

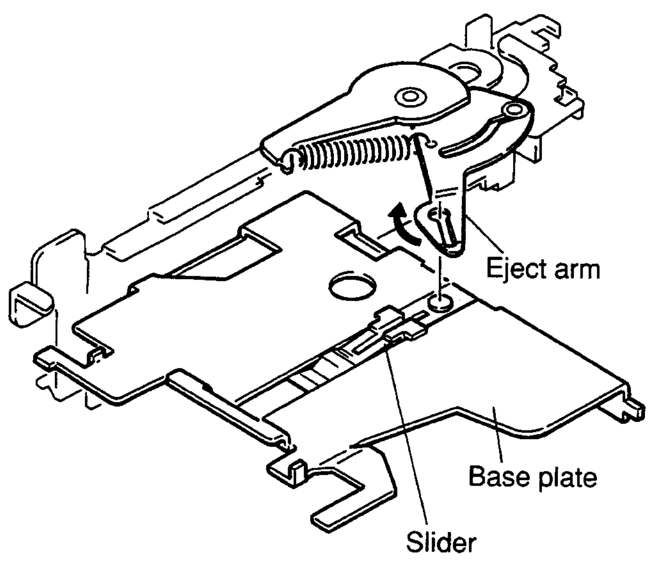


Figure 18

d. Replacement of the reels

(1) Remove M1.7 two lock washers ㉖ (Refer to figure 19).
(2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.
(3) After replacement, mount the new reels following the removal steps in the reverse order.
(4) After mounting, check the tape speed and the wow and flutter with test tape MTT-111.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

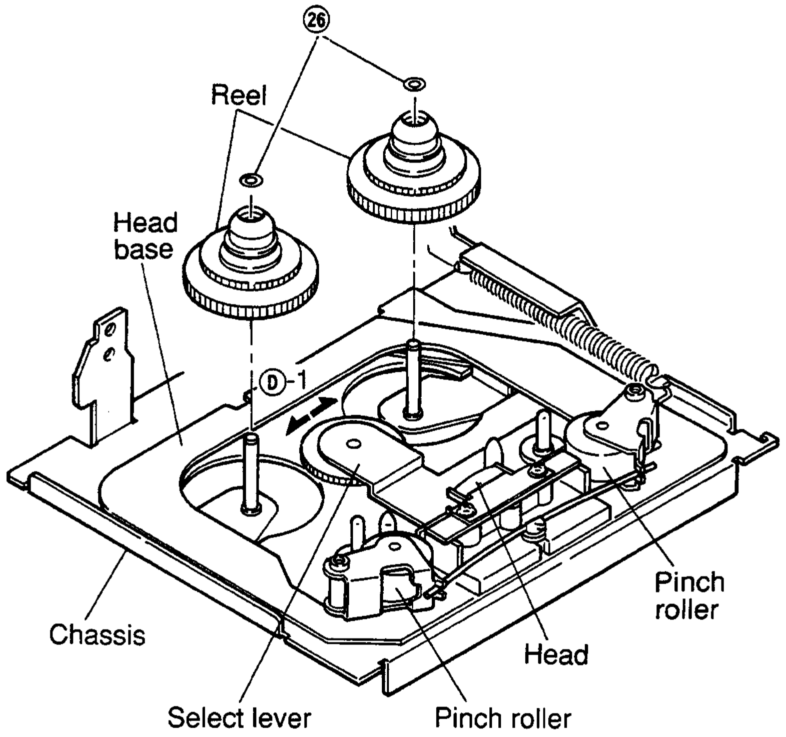


Figure 19

Supl

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ㉗ as shown in Figure 20.
(2) Remove M3.1 two lock washers ㉘ and remove the pinch roller as shown in Figure 20.
(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

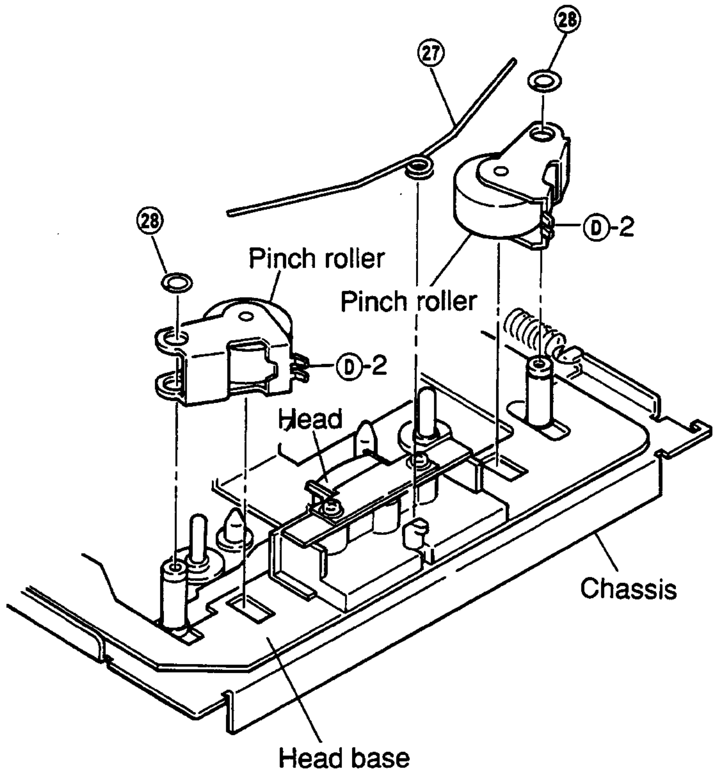

㉘
㉗
㉘
Pinch roller
Pinch roller
Ⓓ-2
Ⓓ-2
Head
Chassis
Head base

Figure 20

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.
(2) Remove solder ㉚ and remove the head from the head P.C. board as shown in Figure 22.
(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board. Make sure that the head P.C. board is not lifted.
2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.

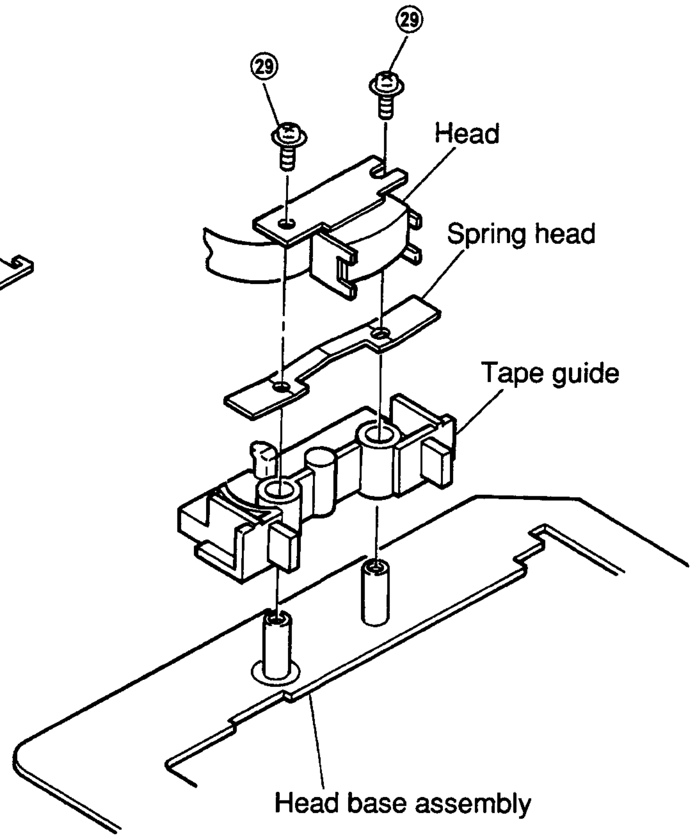

㉙
㉙
Head
Spring head
Tape guide
Head base assembly

Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.
① Place the height adjustment gauge (AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.
② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

Note: If you do not have a height gauge like described in (4)-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

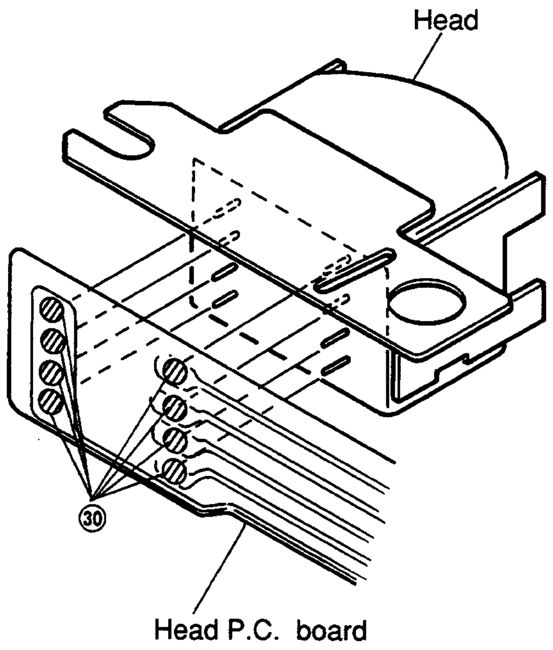

Head
㉚
Head P.C. board

Figure 22

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

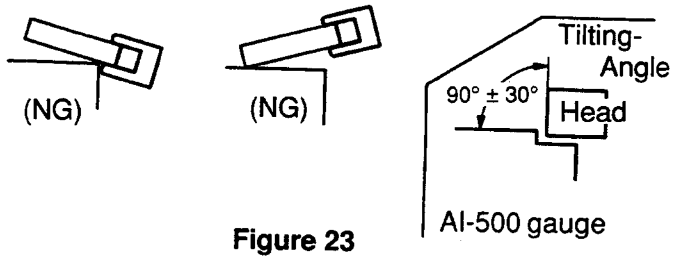

(NG)
(NG)
Tilting-Angle
90° ± 30°
Head
AI-500 gauge

Figure 23

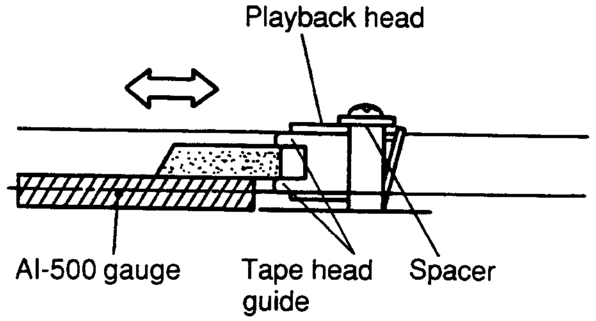
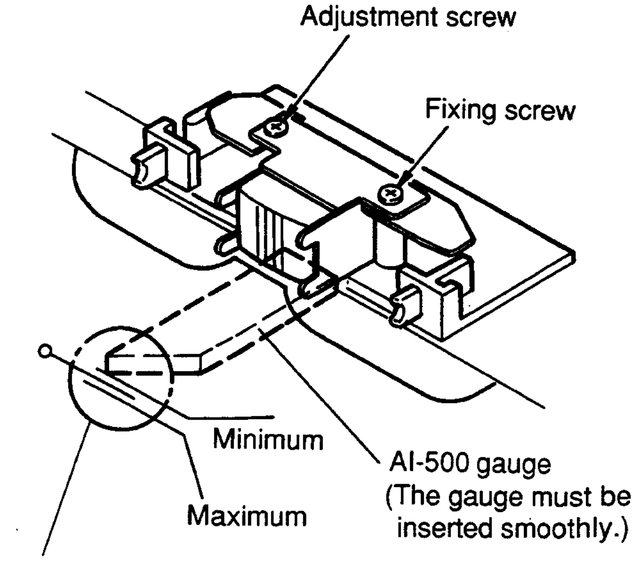

Playback head
AI-500 gauge
Tape head guide
Spacer

Figure 24

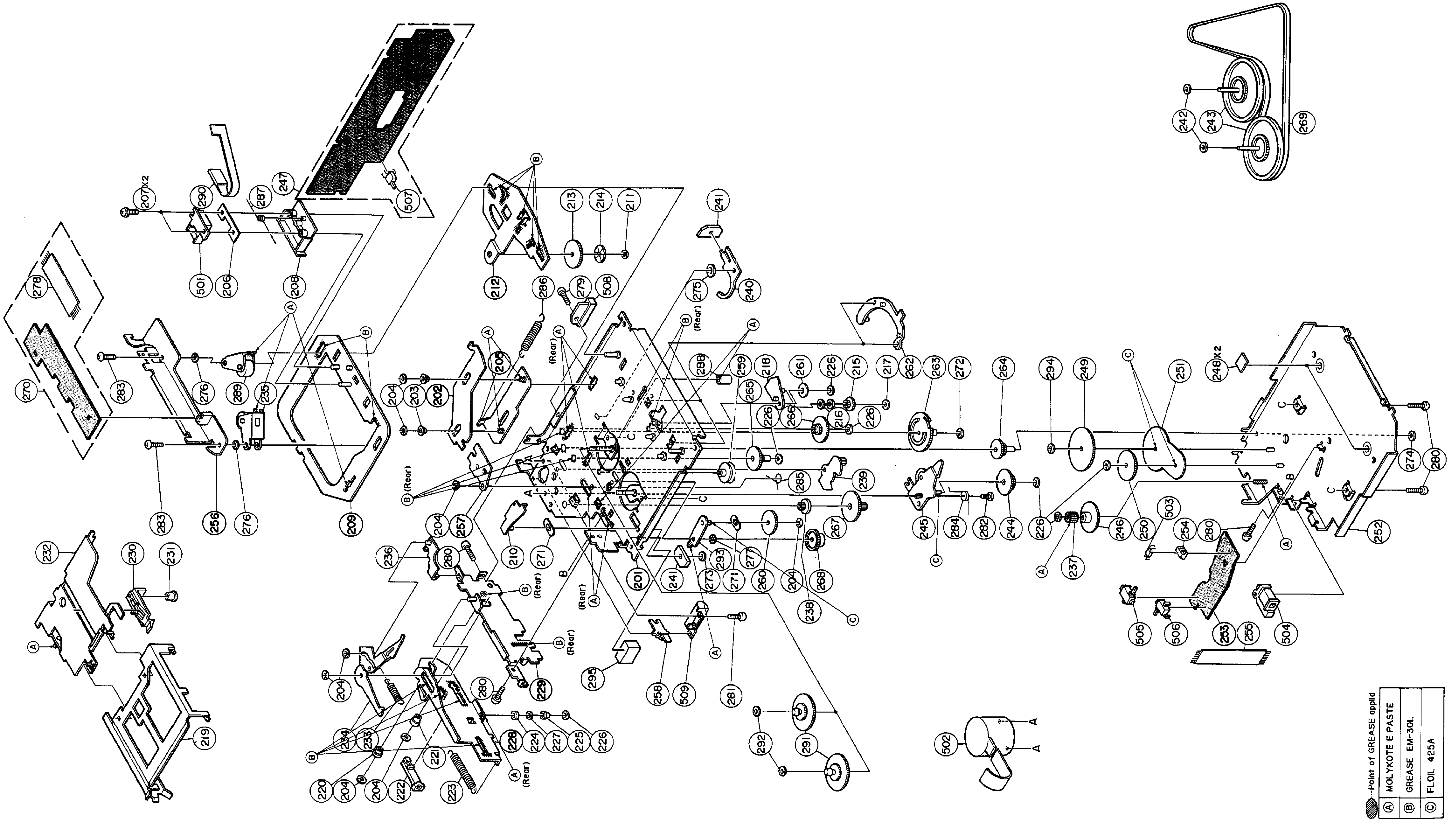

Adjustment screw
Fixing screw
Minimum
Maximum
AI-500 gauge
(The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (1/3)

● For GR75E010/01A/01C/020 Models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Ⓐ	MOLYKOTE E PASTE
Ⓑ	GREASE EM-30L
Ⓒ	FLOIL 425A

Cassette Deck Assembly Parts List (1/3)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A10095W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy..Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A10142W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P35	Washer, Lock(M1.7)
	218	3-E	01A21853W01	Assy., Riv Lever Reverse
	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject A
	225	4-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy..Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A10148W01	Assy., Riv Eject Arm A
	235	3-B	01B10381W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A12975W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A10092W01	Lever, Play
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer Polyslider (M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W01	Assy., Riv Lever Clutch A
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V11500W18	Assy., GR Control P.C. Board
	248	3-G	43A90918F01	Spacer, Polyslider
	249	3-F	44A11063W01	Gear, Bottom A
	250	3-F	44A11064W01	Gear, Bottom B
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B10136W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-D	44A10379W01	Gear, Pause Idler B
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
●	270	3-A	01V14700W68	Assy., GR Audio P.C. Board
■	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
▲	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
○	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
	271	4-D	41A10097W02	Spring, Clutch
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P06	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F38	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B10381W01	Assy., Pinch Roller
	290	2-B	84T10367W01	Head P.C, Board
●	291	4-E	01T15164W01	Assy., Reel
■	291	4-E	01T15164W01	Assy., Reel
▲	291	4-E	01T15164W02	Assy., Reel
○	291	4-E	01T15164W01	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
●	293	4-D	01A11078W01	Assy., Riv Lever Take Up
■	293	4-D	01A11078W01	Assy., Riv Lever Take Up
▲	293	4-D	01A11078W01	Assy., Riv Lever Take Up
○	293	4-D	01A30161W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer, Lock(M1.2)
	295	4-D	75S12196W88	Rubber, Pad
	Miscellaneous			
●	501	2-B	88T15971W01	Head
■	501	2-B	88T10373W01	Head
▲	501	2-B	88T10373W01	Head
○	501	2-B	88T10373W01	Head
	502	4-E	01V11500W64	Assy., Motor
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only ○ ; For GR75E01C model only

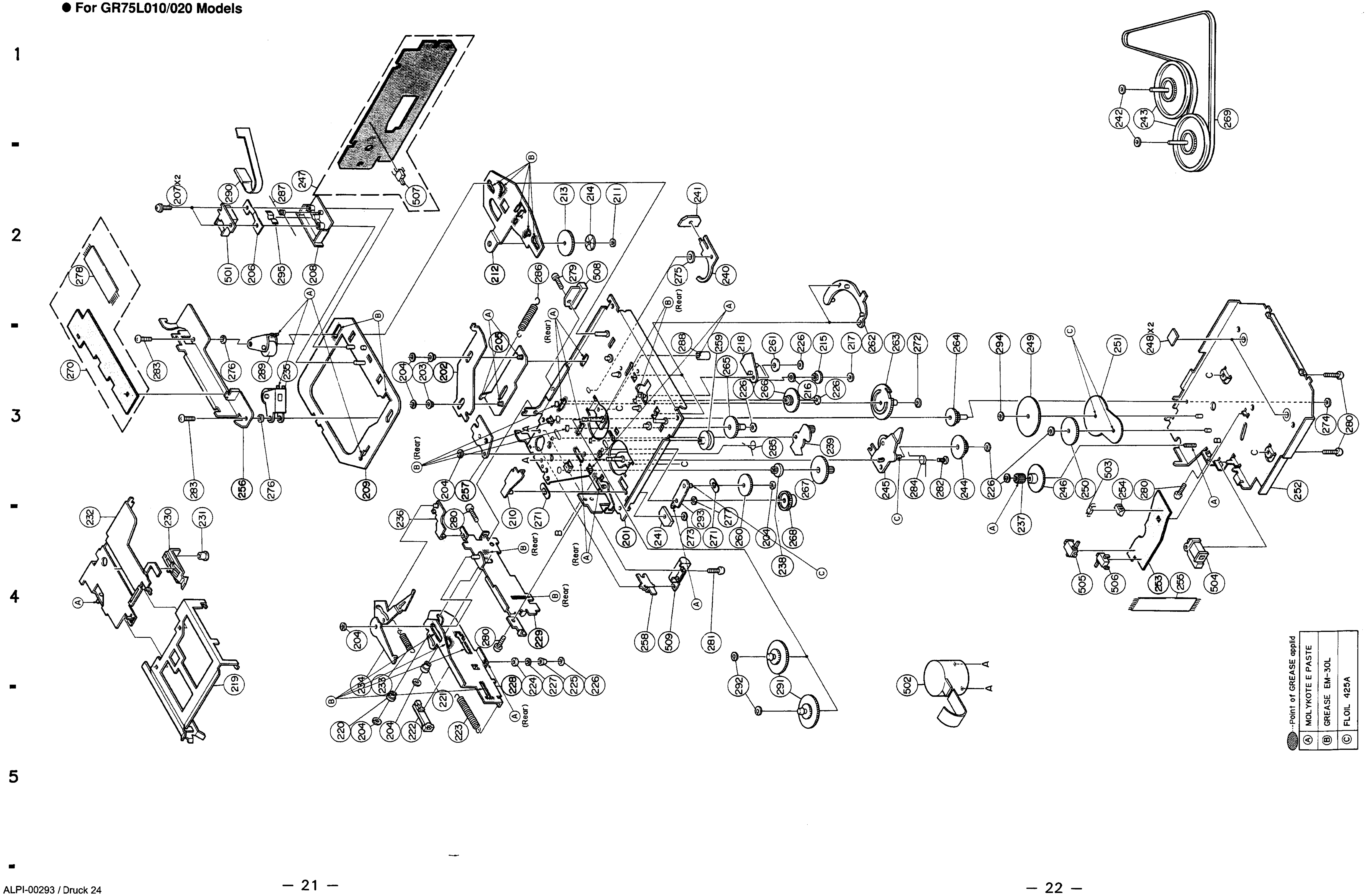
Others ; Common

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only ○ ; For GR75E01C model only

Others ; Common

Exploded View (2/3)

- **For GR75L010/020 Models**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●	···Point of GREASE appld
Ⓐ	MOLYKOTE E PASTE
Ⓑ	GREASE EM-30L
Ⓒ	FLOIL 425A

Cassette Deck Assembly Parts List (2/3)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roll, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A21671W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A10142W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P31	Washer, Lock(M1.7)
	218	3-E	01A21853W01	Assy., Riv Lever Reverse
	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A22153W01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject(A)
	225	4-D	43A10360W01	Roller, Eject(B)
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject(C)
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy., Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
	235	3-B	01B10381W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever, Pack In SW.
	237	4-F	44A20314W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A10092W01	Lever, Play
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer, Polyslider (M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W02	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V23700W03	Assy., GR Control P.C. Board
	248	3-G	43A90918F01	Spacer, Polyslider
	249	3-F	44A11063W01	Gear, Bottom(A)
	250	3-F	44A11064W01	Gear, Bottom(B)
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol.
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B21670W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler(A)
	265	3-D	44A10379W01	Gear, Pause Idler(B)
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
★	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
◆	270	3-A	01V14700W68	Assy., GR Audio P.C. Board
	271		41A10097W02	Spring, Clutch
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P06	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F38	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas. Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B10381W01	Assy., Pinch Roller
	290	2-B	84T10367W01	Head P.C. Board

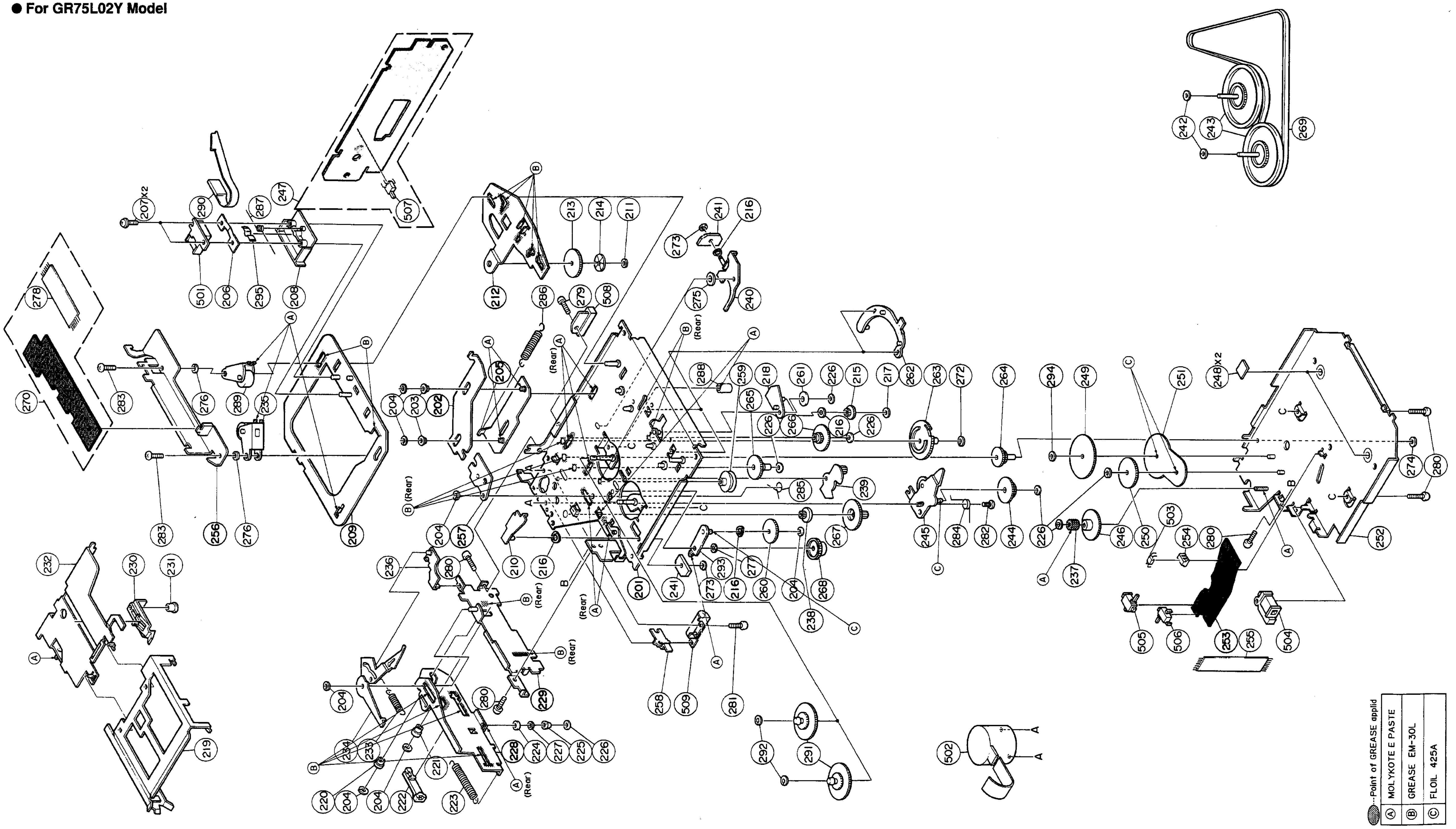
Notes : ★ ; For GR75L010 model only ◆ ; For GR75L020 model only
Others : Common

Symbol No.		IN-dex	Part No.	Description
	291	4-E	01T15164W03	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
	293	4-D	01A11078W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer, Lock(M1.2)
	295	2-B	26A20537W01	Shield, Plate
Miscellaneous				
★	501	2-B	88T10373W01	Head
◆	501	2-B	88T15971W01	Head
	502	4-E	01V23900W60	Assy., Motor
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector (Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ★ ; For GR75L010 model only ◆ ; For GR75L020 model only
Others ; Common

Exploded View (GR-Y Series) (3/3)

● For GR75L02Y Model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234
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▨	···Point of GREASE applid
Ⓐ	MOLYKOTE E PASTE
Ⓑ	GREASE EM-30L
Ⓒ	FLOIL 425A

Cassette Deck Assembly Parts List (GR-Y Series) (3/3)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A21671W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P38	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A10142W01	Gear, Planet
216		41A10097W02	Spring, Clutch
217	3-E	04B41345P31	Washer, Lock(M1.7)
218	3-E	01A21853W01	Assy., Riv Lever Reverse
219	4-B	07B10074W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B10381W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-D	01A30879W01	Assy., Riv. Play Sol.
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
247	2-B	01V23700W04	Assy., GR Control P.C. Board

Symbol No.	IN-dex	Part No.	Description
248	3-G	43A90918F01	Spacer, Polyslider
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
270	3-A	01V33300W03	Assy., GR Audio P.C. Board
272	3-F	04B41345P15	Washer, Lock(M1.2)
273		04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276	3-B	04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F38	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B10381W01	Assy., Pinch Roller
290	2-B	84T35271W01	Head P.C. Board

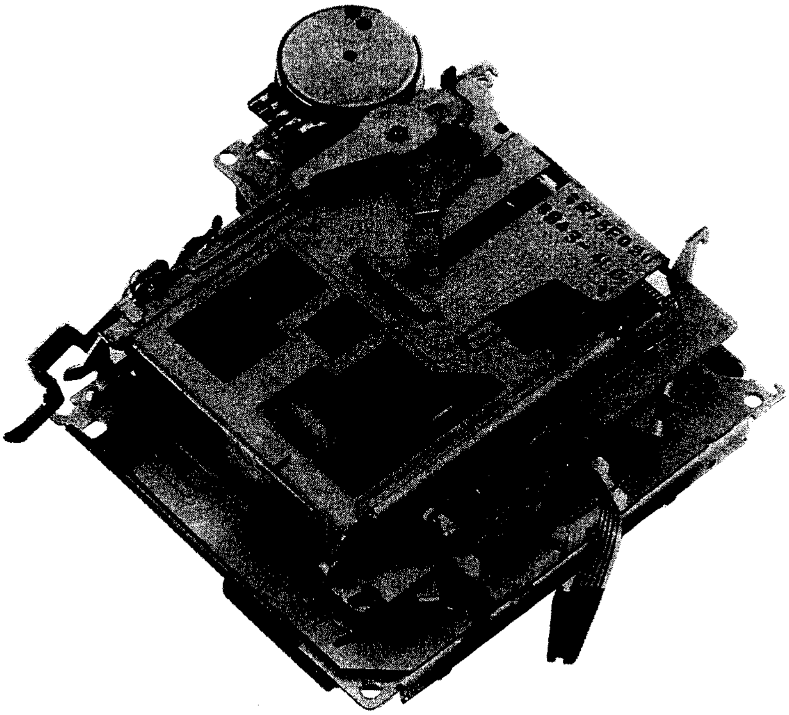
Symbol No.	IN-dex	Part No.	Description
291	4-E	01T15164W03	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
Miscellaneous			
501	2-B	88T15971W01	Head
502	4-E	01V23900W60	Assy., Motor
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (VI)



GR/GR-Y SERIES

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List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY					
			GR75E Series	GR75L Series	GR-Y Series	GR75H 020/030/ 120/130	GR75H 12A/13A	GR75H 110
1	(M1.2 × 3.5 × 0.25)	04B41345P01	4	4	4	2	2	2
2	(M1.7 × 3.5 × 0.25)	04B41345P02	1	1	1	4	6	4
3	(M1.2 × 2.5 × 0.25)	04B41345P11	8	8	8	9	9	9
4	(M1.7 × 3.5 × 0.35)	04B41345P12	2	2	2	2	2	0
5	(M1.2 × 3.5 × 0.35)	04B41345P15	2	2	2	2	2	2
6	(M1 × 2.5 × 0.25)	04B41345P17	1	1	1	2	2	2
7	(M2.6 × 5 × 0.25)	04B41345P29	1	1	1	1	1	1
8	(M3.1 × 8 × 0.05)	04B41345P30	1	1	1	1	1	1
9	(M3.1 × 5 × 0.35)	04B41345P32	2	2	2	2	2	2
10	(M1.2 × 2.5 × 0.3)	04B41345P34	1	1	1	0	0	0
11	(M1.7 × 2.8 × 0.25)	04B41345P35	1	1	1	2	2	2
12	(M2.1 × 4 × 0.25)	04B41345P37	1	1	1	0	0	0
13	(M2.1 × 4 × 0.13)	04S40075G05	2	2	2	3	4	1
14	(M2.1 × 4 × 0.3)	04S40075G58	0	0	0	1	1	1
15	(M2.1 × 5.5 × 0.5)	04S40075G62	0	0	0	1	1	1
16	(M2.1 × 5.5 × 0.13)	04S40075G63	0	0	0	1	1	1

List of Usable Oil

1) Molykote G paste
2) Grease EM-30L
3) Grease PG-671

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   AI-500 (Part No. AI-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.

(2) Remove M1 lock washer ① as shown in Figure 1.

(3) Remove three screws ② as shown in Figure 1.

(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.

(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.

(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.

(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.

(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.

(9) Turn the mechanism around as shown in Figure 3.

(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.

(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)

(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly in the direction Ⓐ-11.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figures 4 and 5.)

(13) Fix the screws and the lock washer that have been removed.

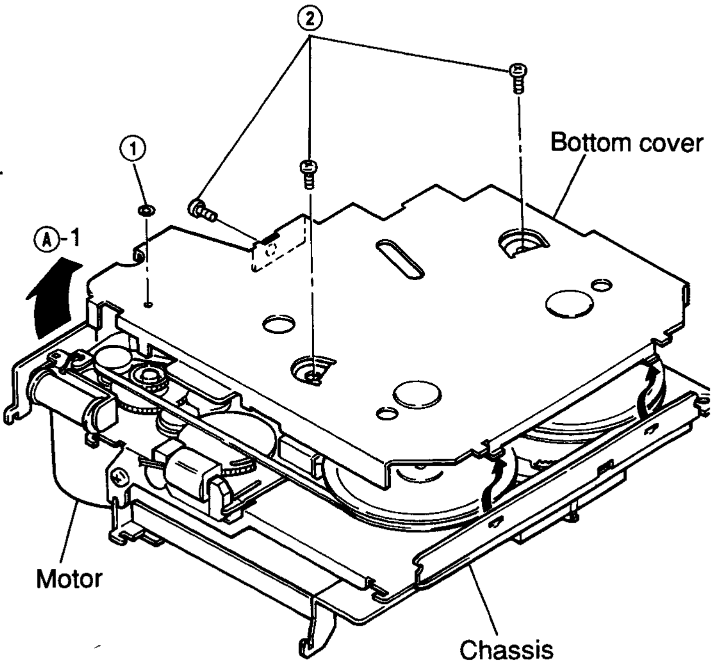


Figure 1

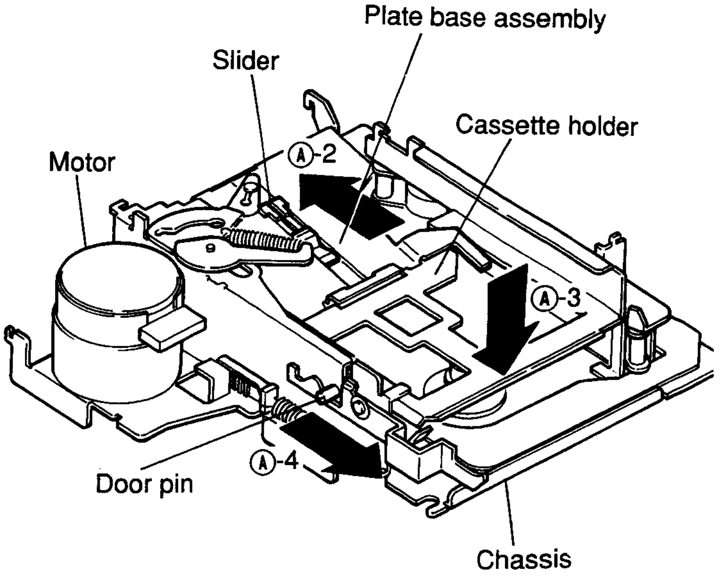


Figure 2

(14)Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg.cm.

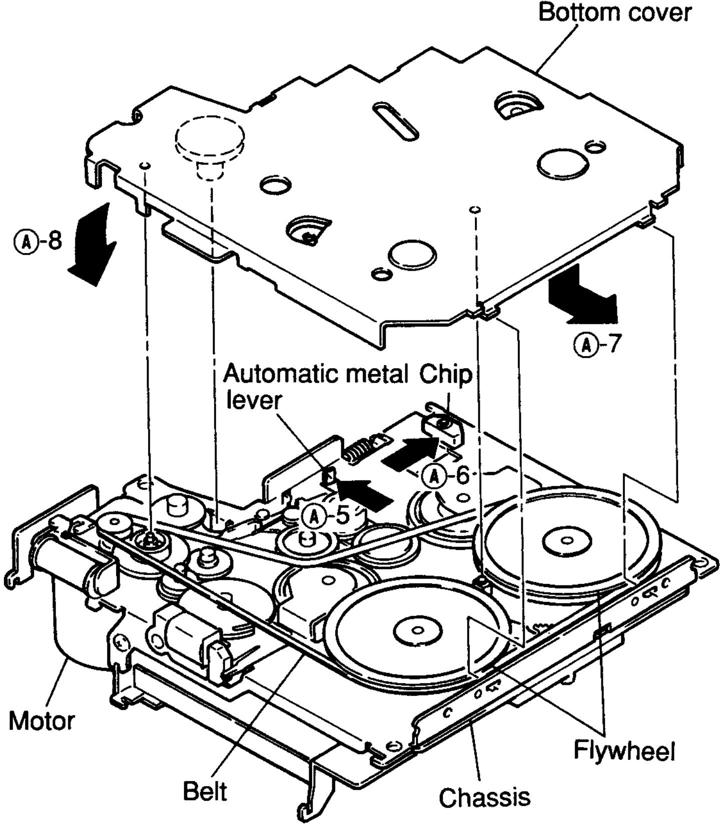

Bottom cover
Ⓐ-8
Ⓐ-7
Automatic metal lever
Chip
Ⓐ-6
Ⓐ-5
Motor
Belt
Chassis
Flywheel

Figure 3

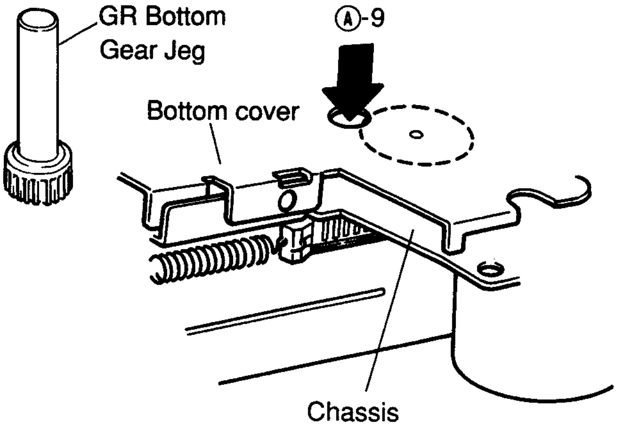

GR Bottom Gear Jeg
Ⓐ-9
Bottom cover
Chassis

Figure 4

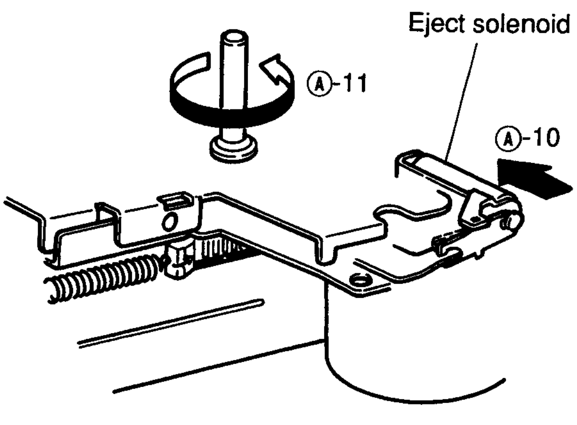

Eject solenoid
Ⓐ-11
Ⓐ-10

Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear

(1) Remove M1.2 lock washer ③ as shown in Figure 6.

(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.

(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid

(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.

(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

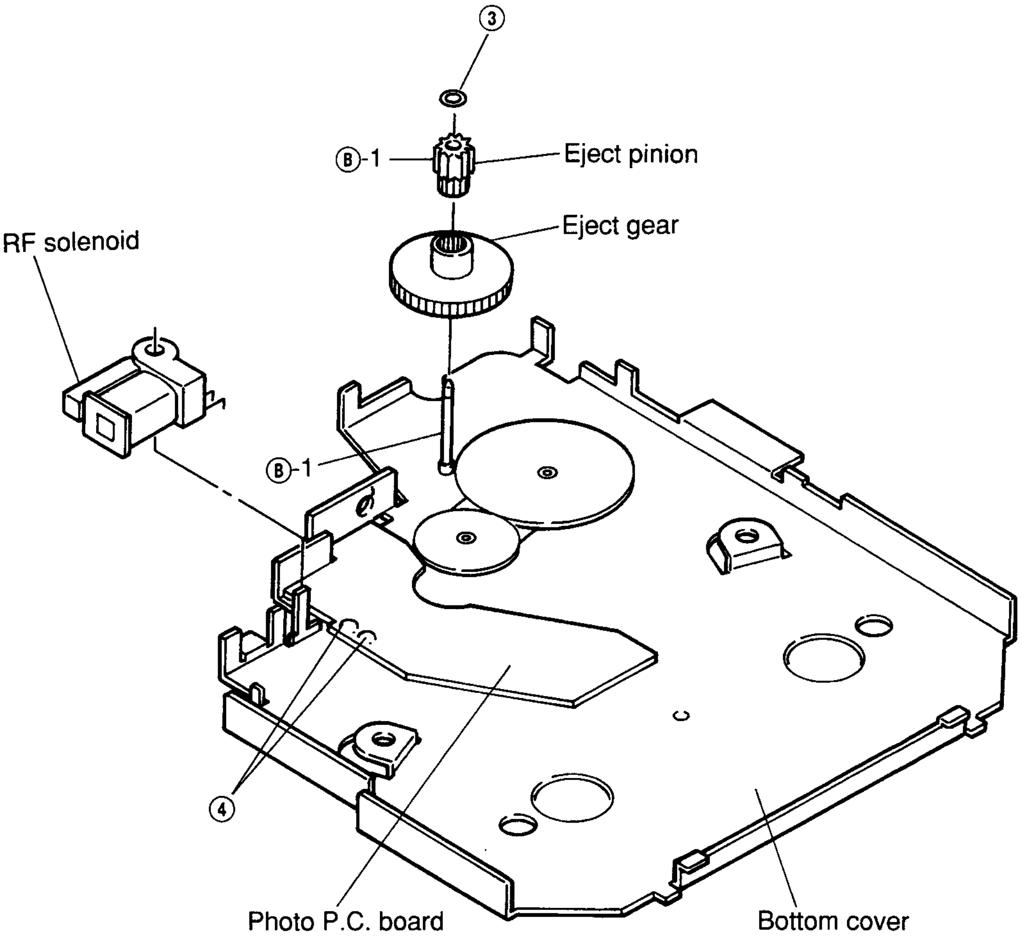


Figure 6

c. Replacement of the photo sensor

(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo P.C. board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked Ⓑ-2 as shown in Figure 7.
(4) Insert the photo guide into the P.C. board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch (Automatic metal pack-in)

(1) Remove 4 solders ⑥ with which the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo P.C. board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

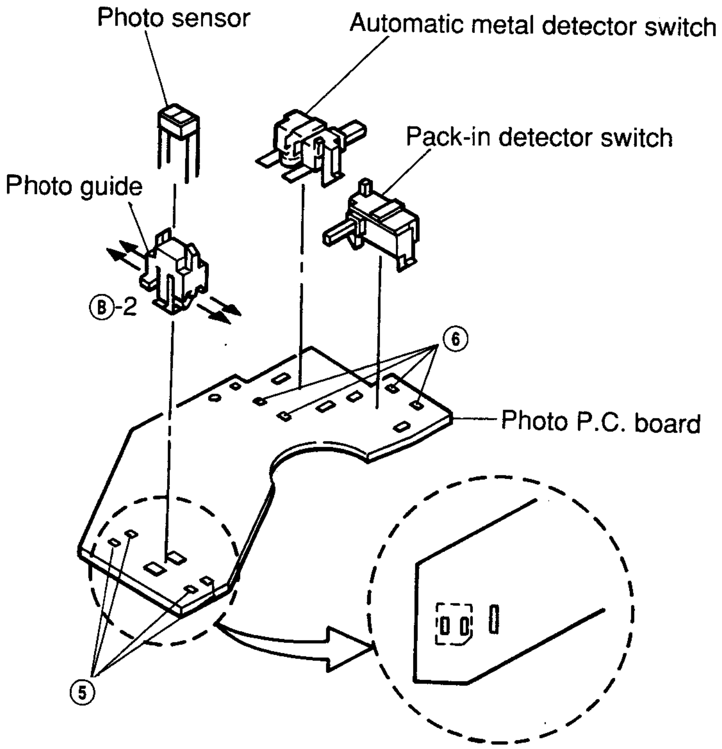


Figure 7

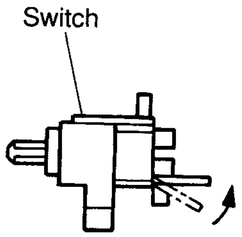


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.

(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

b. Replacement of the motor

(1) After removing the belt, remove spring ⑦ as shown in Figure 10.

(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control P.C. board as shown in Figure 11.

(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)

(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

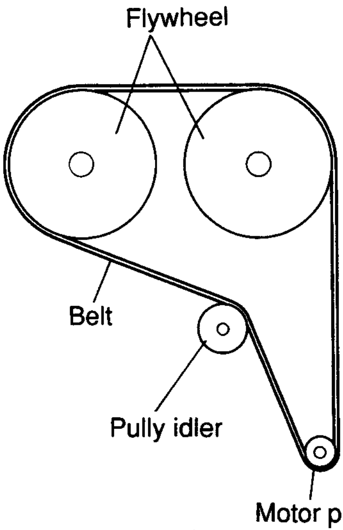
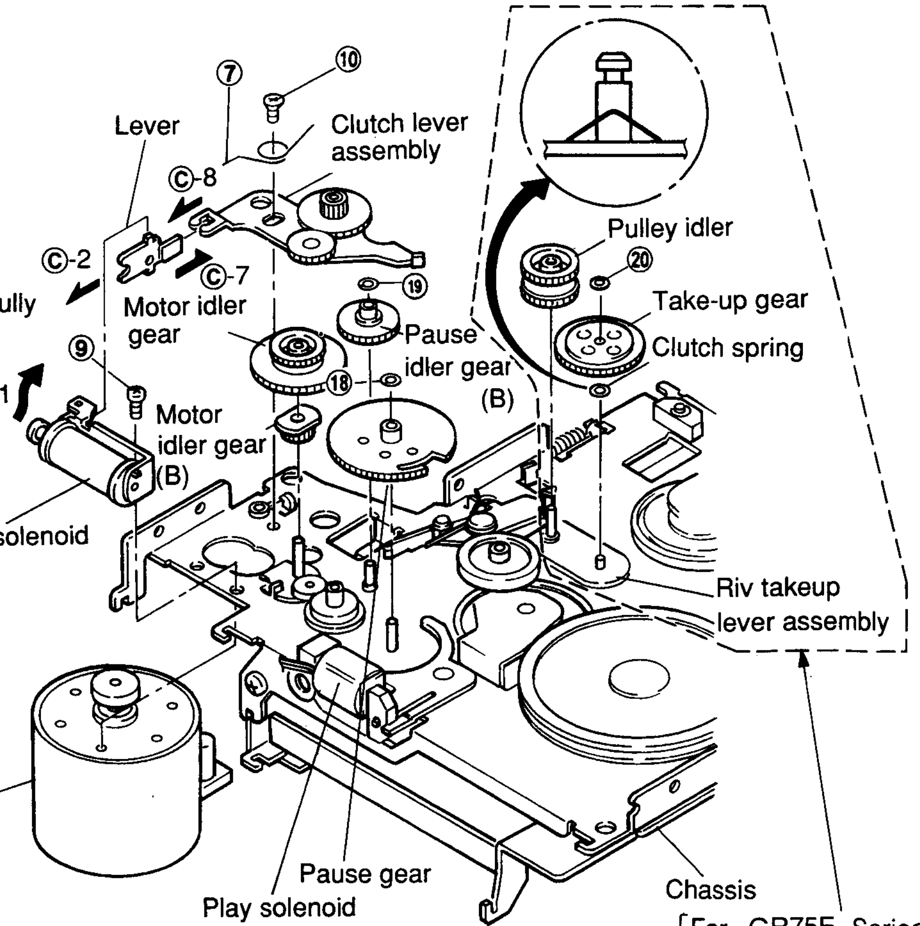

Flywheel
Belt
Pully idler
Motor pully

Figure 9


⑦
⑩
Lever
Clutch lever assembly
©-8
©-2
©-7
Motor idler gear
⑨
©-1
Motor idler gear (B)
Eject solenoid
⑲
Pause idler gear (B)
⑱
Pulley idler
⑳
Take-up gear
Clutch spring
Riv takeup lever assembly
Motor
Pause gear
Play solenoid
Chassis

For GR75E Series
GR75L Series
GR-Y Series
models

Figure 10

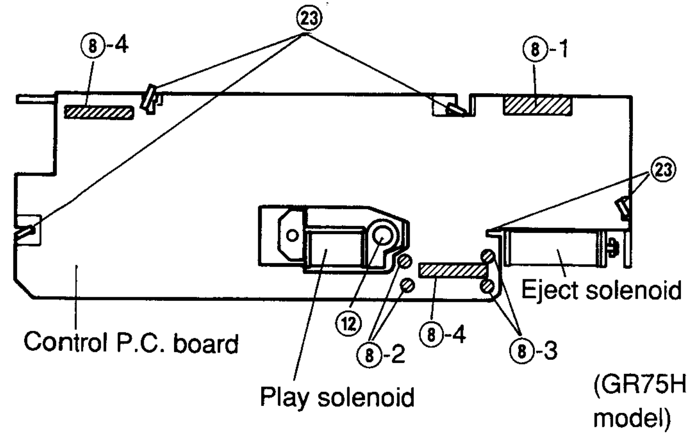
c. Replacement of the flywheels
  (1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)
  (2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

d. Replacement of the play solenoid
  (1) Remove the two solders ⑧-2 as shown in Figure 11.
  (2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.
  (3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.

e. Replacement of the eject solenoid
  (1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)
  (2) Remove screw ⑨ and remove the solenoid as shown in Figure 10.
  (3) Align position ⓒ-1 of the new solenoid with position ⓒ-2 of the lever and fasten the screw as shown in Figure 10.
  (4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm. As the solenoid wires are not insulated, do not let them cross each other.


㉓
⑧-4
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

[For GR75E Series model]

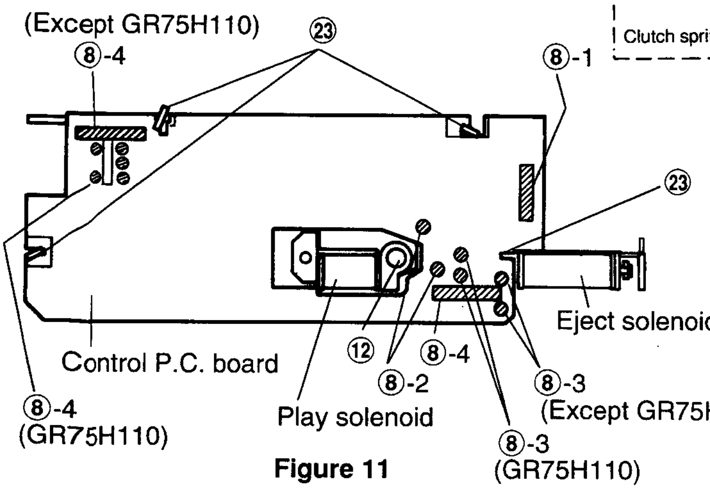

(Except GR75H110)
⑧-4
㉓
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-4
⑧-2
⑧-3
(Except GR75H110)
⑧-4
(GR75H110)
Play solenoid
⑧-3
(GR75H110)

Figure 11

[For GR75L Series
GR-Y Series
GR75H Series models]

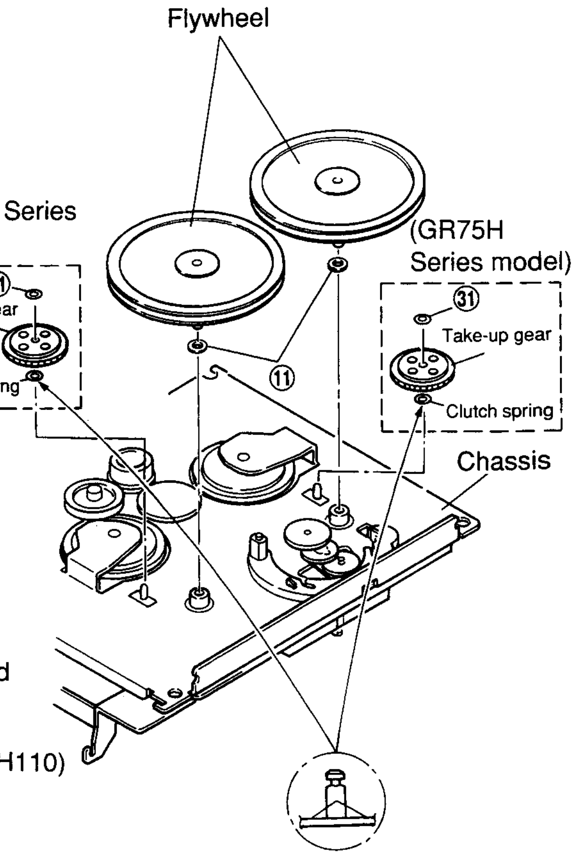

Flywheel
(GR75H Series model)
㉛
Take-up gear
Clutch spring
⑪
(GR75H Series model)
㉛
Take-up gear
Clutch spring
Chassis

Figure 12

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

(1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.

(2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

(1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.

(2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

(1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ⓒ-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.

(2) Insert the section ⓒ-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

(1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.

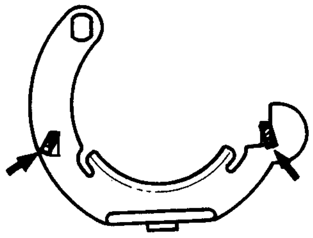
(2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.

(3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:

After mounting all parts, check if the reverse lever moves in the directions marked ⓒ-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend the claws ⑮ into the form of as shown in the Figure.



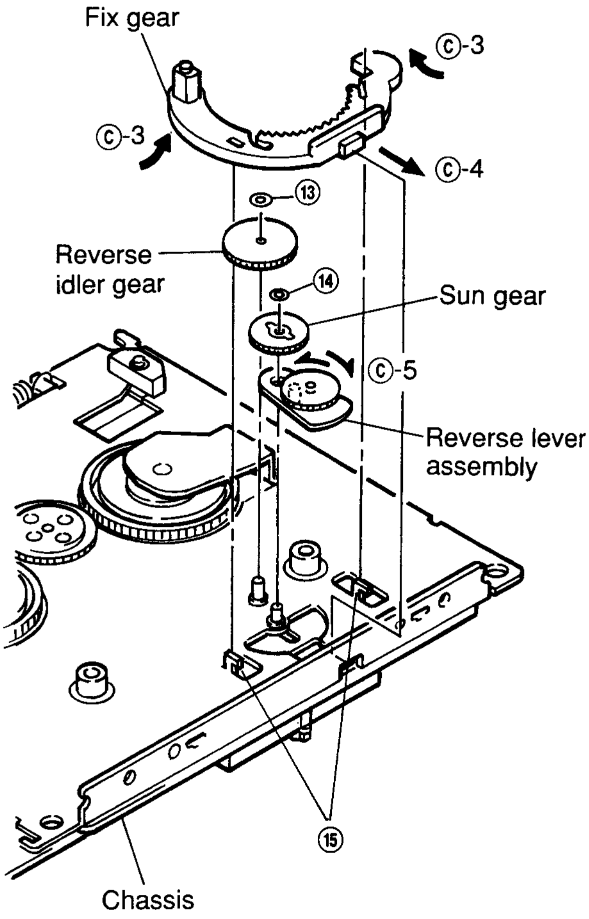


Figure 13

(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.

(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.

(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (PG-671) to the position ©-6 as shown in Figure 15. Align the position ©-7 with the position ©-8 and mount the clutch lever as shown in Figures 10 and 15.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.

(2) Mount the new gear following the removal steps in the reverse order.

(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.

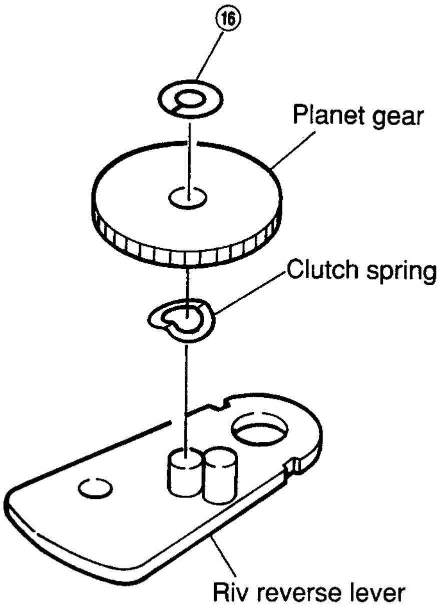
(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the riv take-up lever assembly as shown in Figure 10. [For GR75E Series, GR75L Series, GR-Y Series models] After removing the Flywheel, remove M1.2 lock washer ㉛ and remove the gear by pulling it up from the stud of the chassis as shown in figure 12. [For GR75H Series model]

(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:
Do not reus e the used washers. Take care to avoid damage by piercing and tearing.



[Disassembly Reverse Lever Assembly]

Figure 14

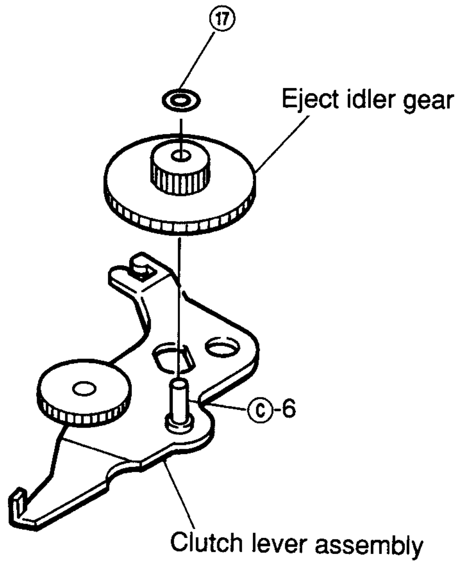


Figure 15

4. Replacement of the parts mounted on the front of the main chassis

a. Replacement of the audio P.C. board (Except GR75H110)

(1) Remove two solders ㉑ and remove the parallel wire (7P) and the head P.C. board as shown in Figure 16.

(2) Adjust the two claws ㉒ to the rectangular holes on the P.C. board and remove the P.C. board as shown in Figure 16.

(3) After replacement, mount the new P.C. board following the removal steps in the reverse order.

Note: The head P.C. board and the parallel wire are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board.

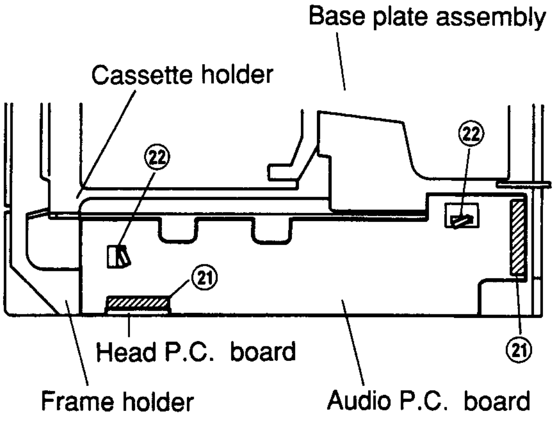

Base plate assembly
Cassette holder
㉒
㉒
㉑
Head P.C. board
㉑
Frame holder
Audio P.C. board

Figure 16

b. Replacement of the control P.C. board

(1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.

(2) Remove five claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75E Series model] Remove four claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75L Series, GR-Y Series, GR75H Series models]

(3) After replacing the old P.C. board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

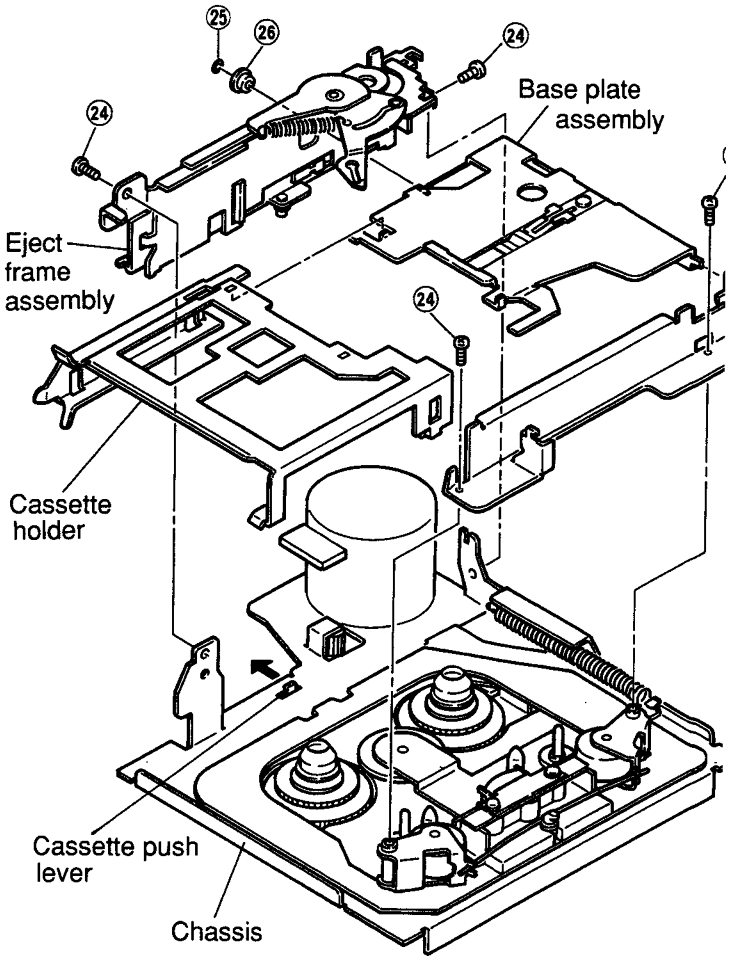

㉕
㉖
㉔
㉔
Base plate assembly
Eject frame assembly
㉔
Cassette holder
Cassette push lever
Chassis

Figure 17

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.

(2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.

(3) Remount them following the removal steps in the reverse order.

Notes:
1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).
2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.
3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.
4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

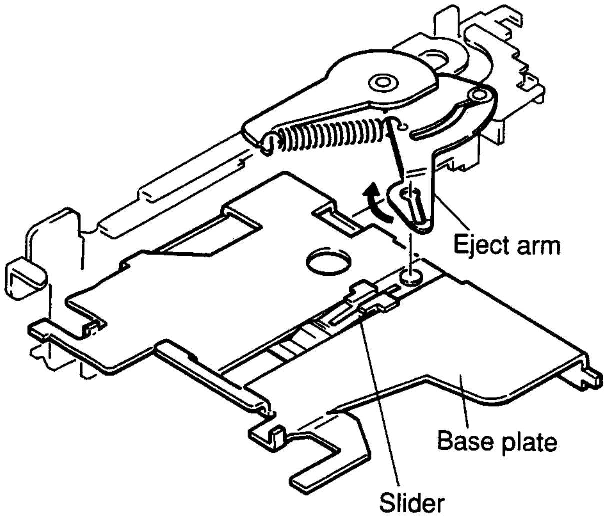


Figure 18

d. Replacement of the reels

(1) Remove M1.7 two lock washers ㉖ (Refer to figure 19).

(2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.

(3) After replacement, mount the new reels following the removal steps in the reverse order.

(4) After mounting, check the tape speed and the wow and flutter with test tape MTT-111.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

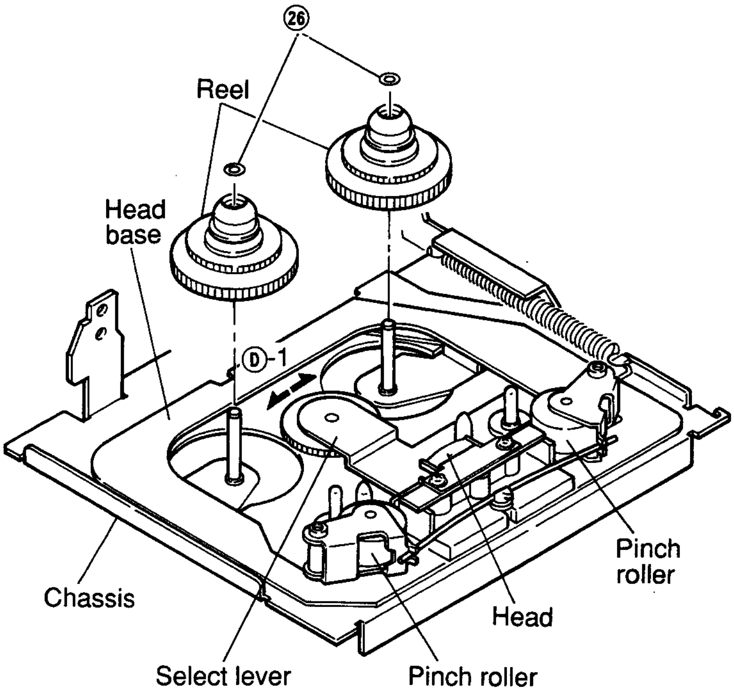


Figure 19

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ㉗ as shown in Figure 20.

(2) Remove M3.1 two lock washers ㉘ and remove the pinch roller as shown in Figure 20.

(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

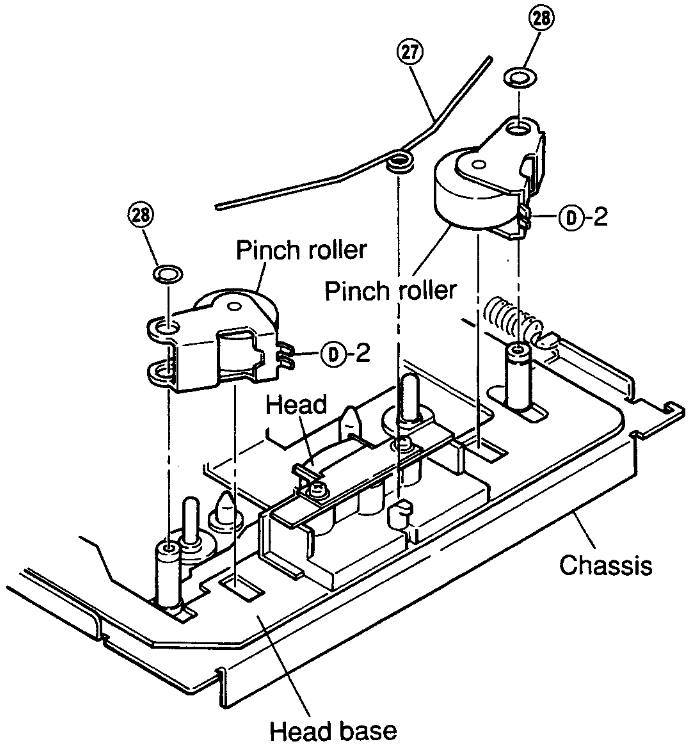

㉘
㉗
㉘
Ⓓ-2
Pinch roller
Pinch roller
Ⓓ-2
Head
Chassis
Head base

Figure 20

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.

(2) Remove solder ㉚ and remove the head from the head P.C. board as shown in Figure 22.

(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board. Make sure that the head P.C. board is not lifted.

2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.

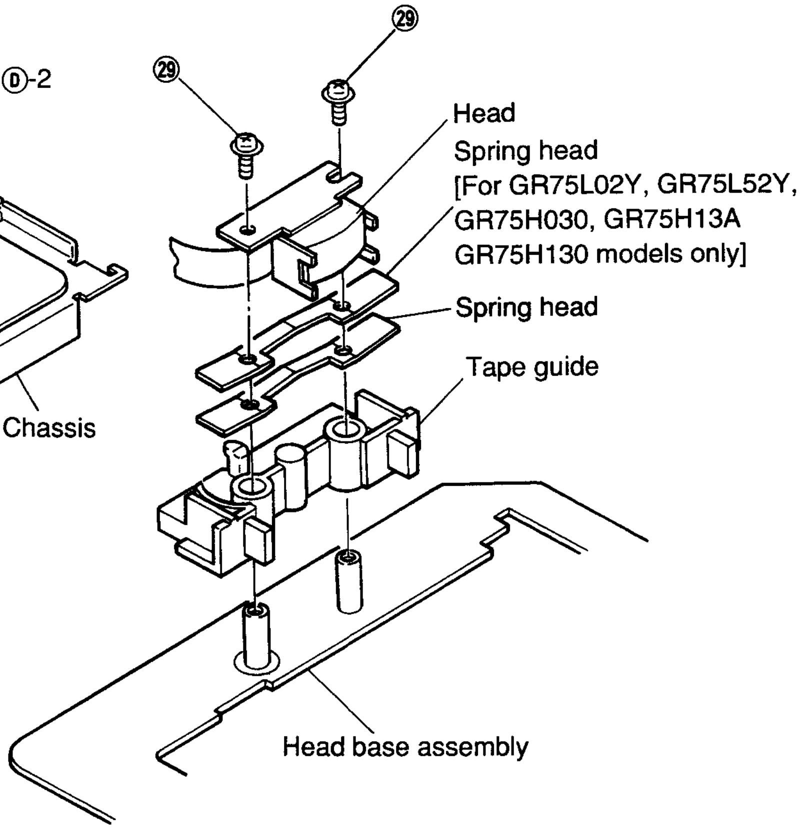

㉙
㉙
Head
Spring head
[For GR75L02Y, GR75L52Y, GR75H030, GR75H13A GR75H130 models only]
Spring head
Tape guide
Head base assembly

Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.

① Place the height adjustment gauge (AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

Note: If you do not have a height gauge like described in (4)-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

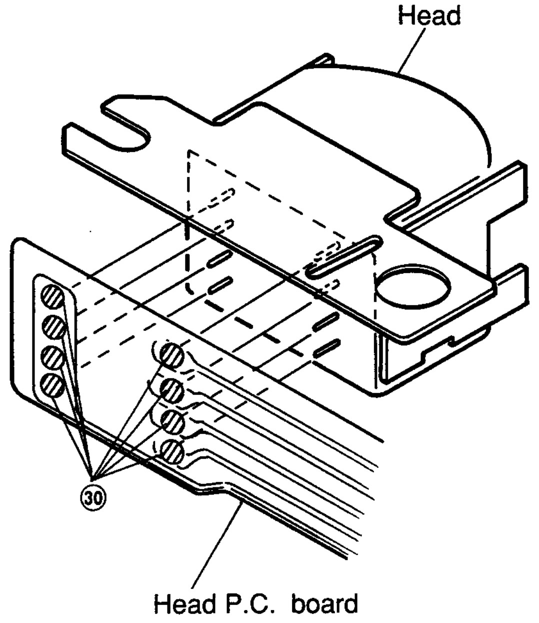

Head
㉚
Head P.C. board

Figure 22

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

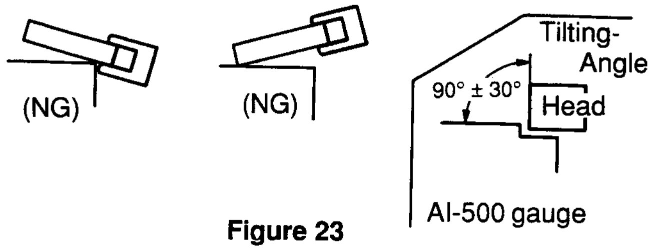

(NG)
(NG)
Tilting-Angle
90° ± 30°
Head
AI-500 gauge

Figure 23

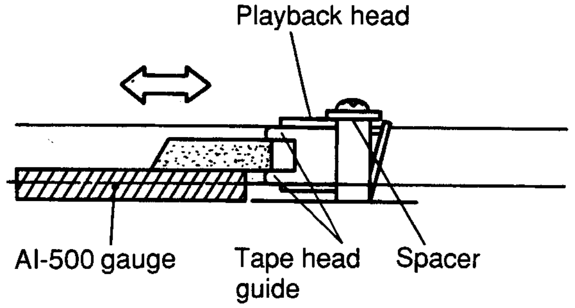
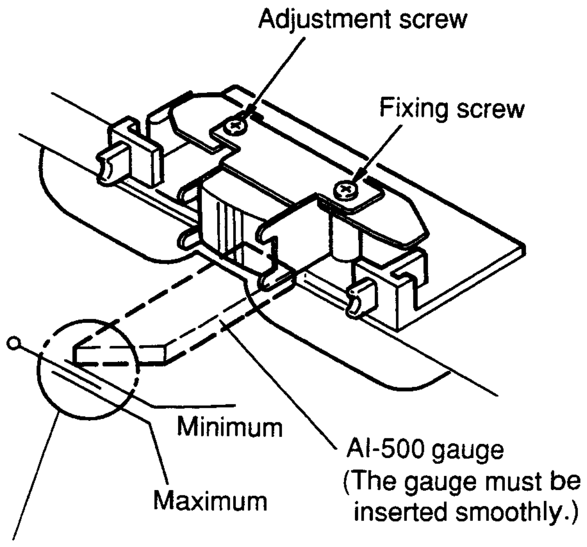

Playback head
AI-500 gauge
Tape head guide
Spacer

Figure 24

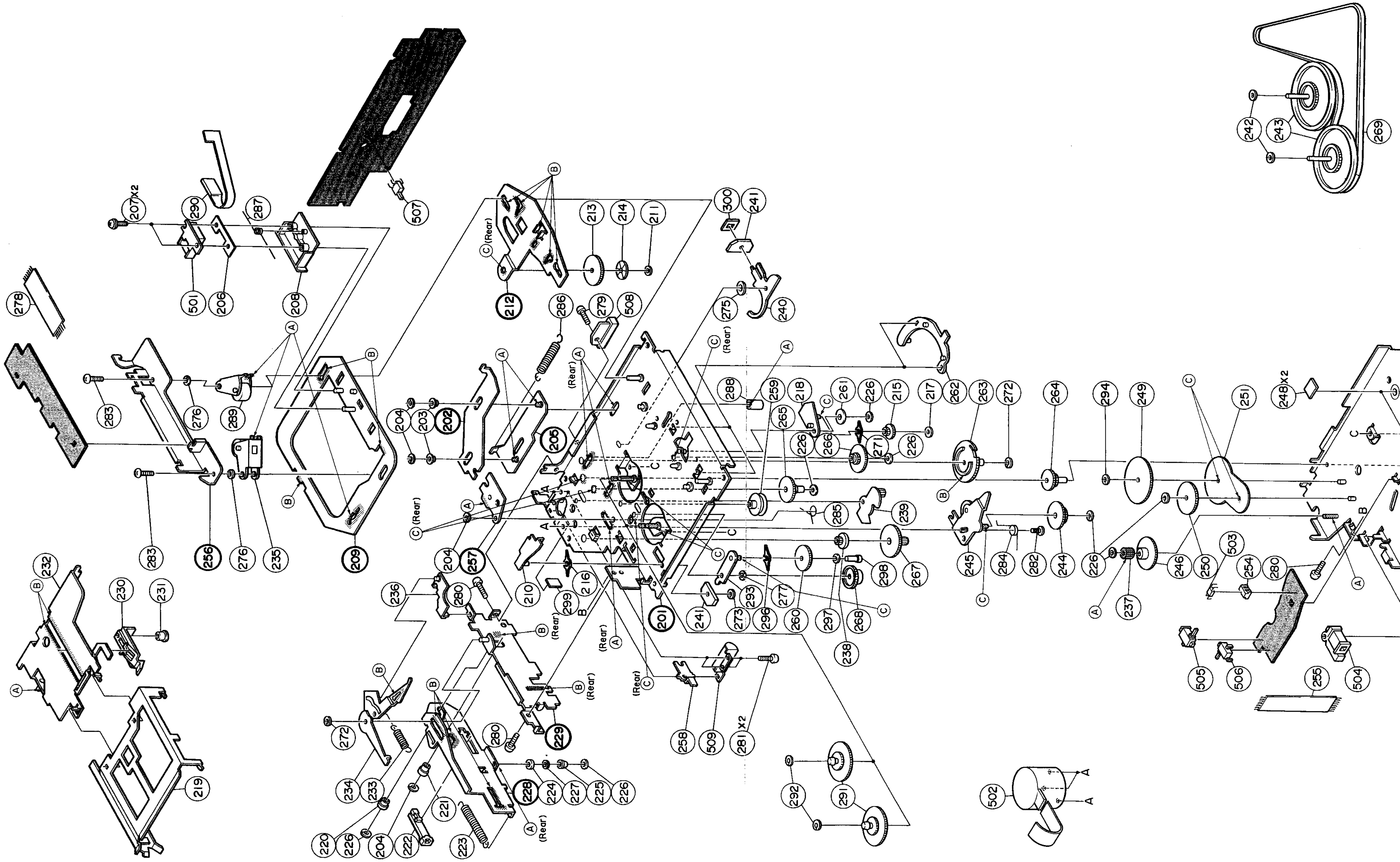

Adjustment screw
Fixing screw
Minimum
Maximum
AI-500 gauge (The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (GR75E Series) (1/4)

- **For GR75E010/01A/020 Models**


207×2
290
287
501
206
208
507
278
283
276
289
256
276
235
283
209
Ⓐ
Ⓑ
232
230
231
219
Ⓐ
Ⓒ(Rear)
212
213
214
211
286
279
508
204
203
202
206
(Rear)
Ⓐ
Ⓒ(Rear)
204
257
210
299
216
236
280
(Rear)
229
272
234
233
220
226
204
222
221
223
280
228
224
227
225
226
Ⓐ(Rear)
Ⓑ(Rear)
300
241
240
275
Ⓒ(Rear)
288
259
218
265
226
266
261
226
215
271
226
217
262
263
272
285
239
201
241
273
293
296
277
260
297
298
238
268
267
Ⓒ
(Rear)
Ⓒ
258
509
281×2
292
291
264
294
249
251
245
284
282
244
226
237
246
250
503
254
280
242
243
269
248×2
274
280
252
505
506
255
504
502
Ⓐ
Ⓑ
Ⓒ

●	··Point of GREASE applid
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75E Series) (1/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A31756W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy., Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A30480W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P35	Washer, Lock(M1.7)
	218	3-E	01A30824W01	Assy., Riv Lever Reverse
●	219	4-B	07B40283W01	Holder, Cassette
■	219	4-B	07B40283W01	Holder, Cassette
▲	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject A
	225	4-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy.,Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A10148W01	Assy., Riv Eject Arm A
	235	3-B	01B30863W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A12975W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A40725W01	Lever, Play Sol
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer Polyslider(M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch A

Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Symbol No.		IN-dex	Part No.	Description
	246	3-F	44A10145W01	Gear, Eject
	248	3-G	43A41656W01	Spacer, UHMW
	249	3-F	44A11063W01	Gear, Bottom A
	250	3-F	44A11064W01	Gear, Bottom B
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B30484W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-D	44A10379W01	Gear, Pause Idler B
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
	271	3-E	41A30475W01	Spring, Clutch
	272		04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276		04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P37	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F53	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch(M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B30863W01	Assy., Pinch Roller
	290	2-B	84T25151W01	Head P.C. Board

Symbol No.		IN-dex	Part No.	Description
	291	4-E	01T35403W01	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
	293	4-D	01A30161W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer Lock(M1.2)
	296	4-D	41A40910W01	Spring, Clutch
	297	4-E	43A41543W01	Washer, Som(M1.2)
	298	3-E	47A41458W01	Pin, Take Up
	299	4-C	43A40388W01	Spacer, Polyslider
	300	2-D	43A41744W01	Lock, Solenoid

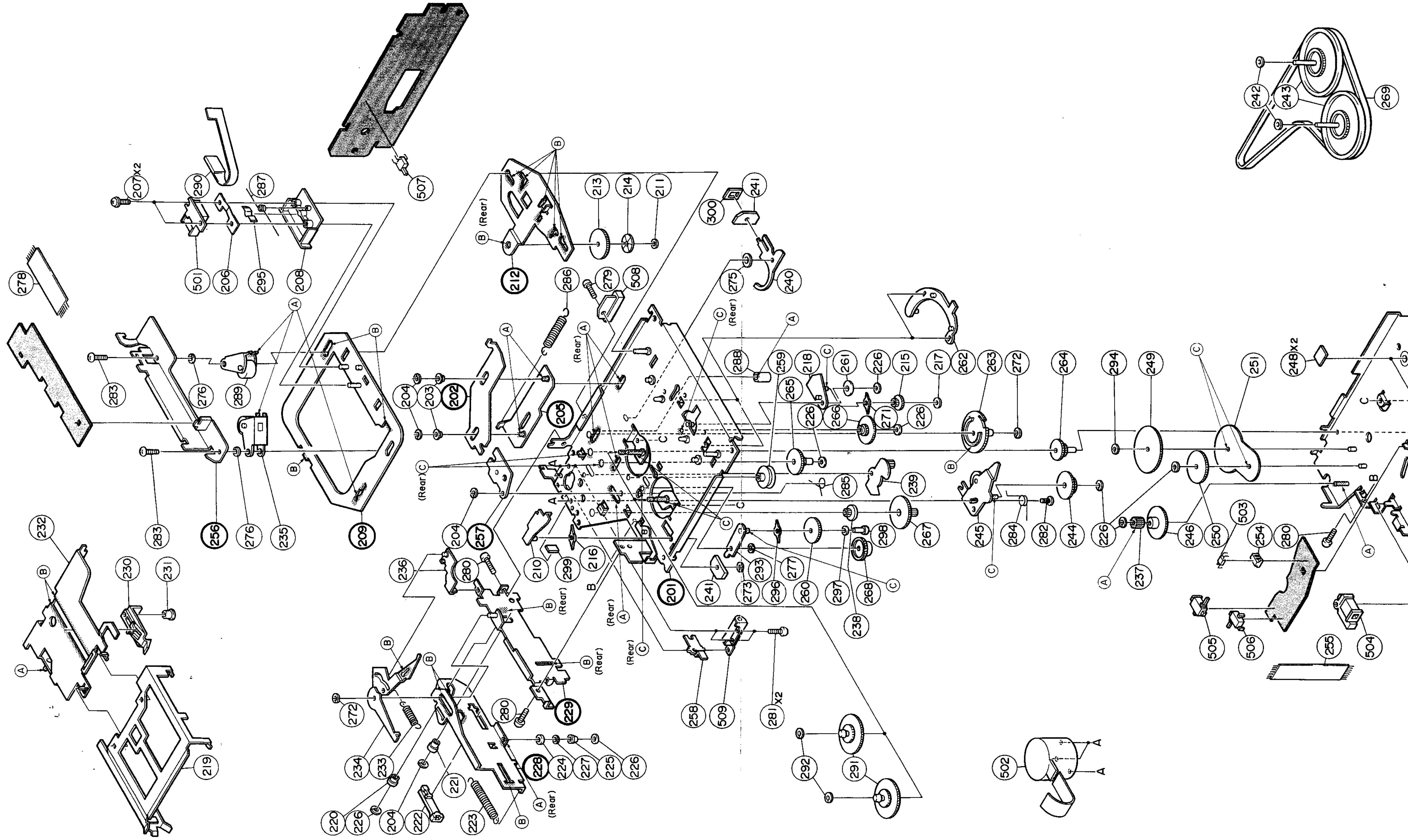
Miscellaneous

Symbol No.		IN-dex	Part No.	Description
●	501	2-B	88T15971W01	Head
■	501	2-B	88T10373W01	Head
▲	501	2-B	88T10373W01	Head
	502	4-E	01V11500W64	Assy., Motor(Main, 13.2V-80mA)
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector(Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Exploded View (GR75L Series) (2/4)

- **For GR75L020/02A Models**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▨ ···Point of GREASE applid

Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75L Series) (2/4)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216	3-E	41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
219	4-B	07B40283W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-E	45A40725W01	Lever, Play Sol
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider(M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
248	3-G	43A41656W01	Spacer, UHMW

Symbol No.	IN-dex	Part No.	Description
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
271	3-E	41A30475W01	Spring, Clutch
272	3-F	04B41345P15	Washer, Lock(M1.2)
273	4-D	04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276		04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch(M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T25151W01	Head P.C. Board
291	4-E	01T35403W02	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)

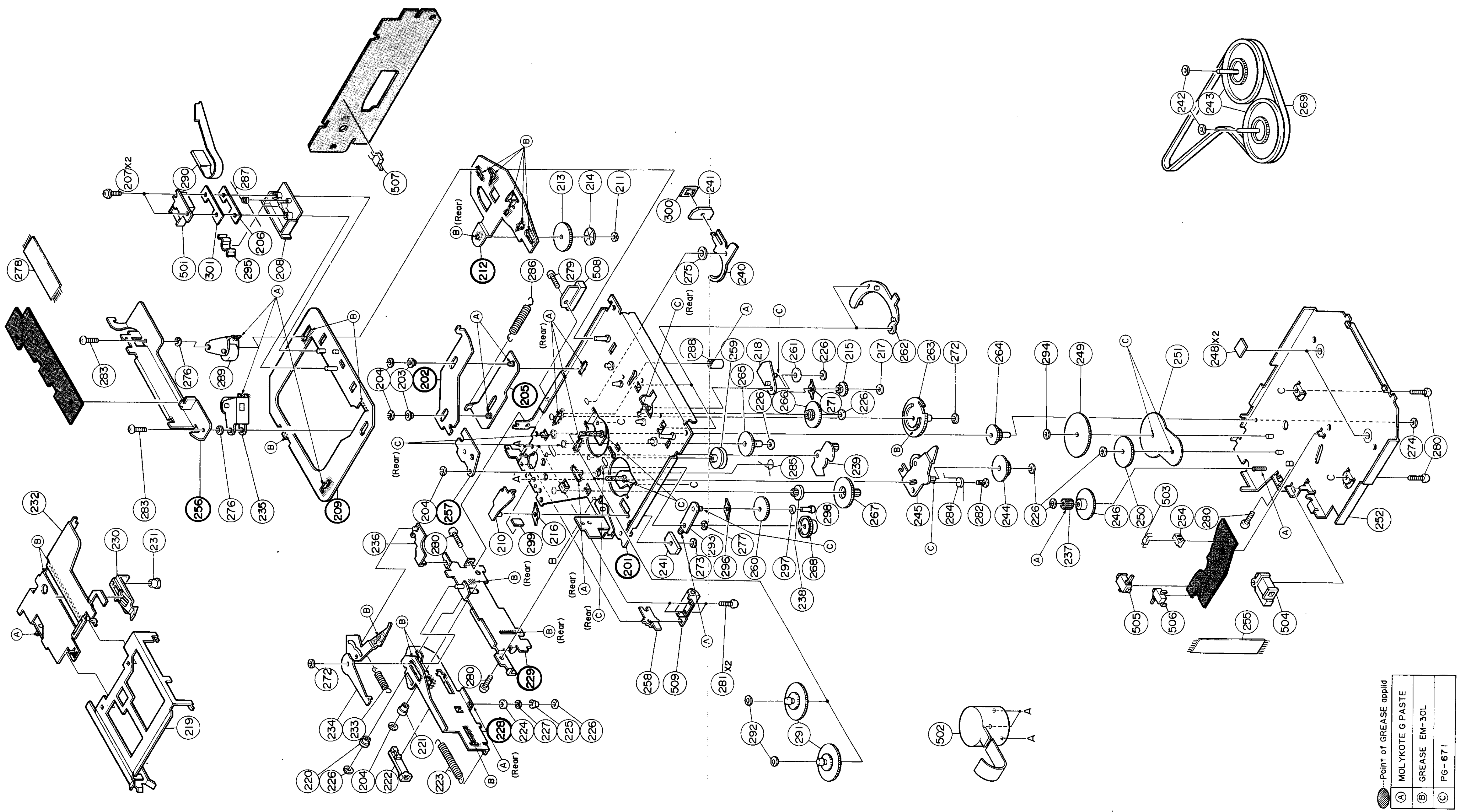
Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Symbol No.	IN-dex	Part No.	Description
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	3-D	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid
Miscellaneous			
501	2-B	88T15971W01	Head
◆ 502	4-E	01V23900W60	Assy., Motor(13.2V-105mA)
○ 502	4-E	01V43400W37	Assy., Motor(13.2V-88mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Exploded View (GR-Y Series) (3/4)

- **For GR75L02Y/52Y Model**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●…Point of GREASE applid

Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR-Y Series) (3/4)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216		41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
219	4-B	07B40283W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-D	45A40725W01	Lever, Play Sol.
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider(M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
248	3-G	43A41656W01	Spacer, UHMW

Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

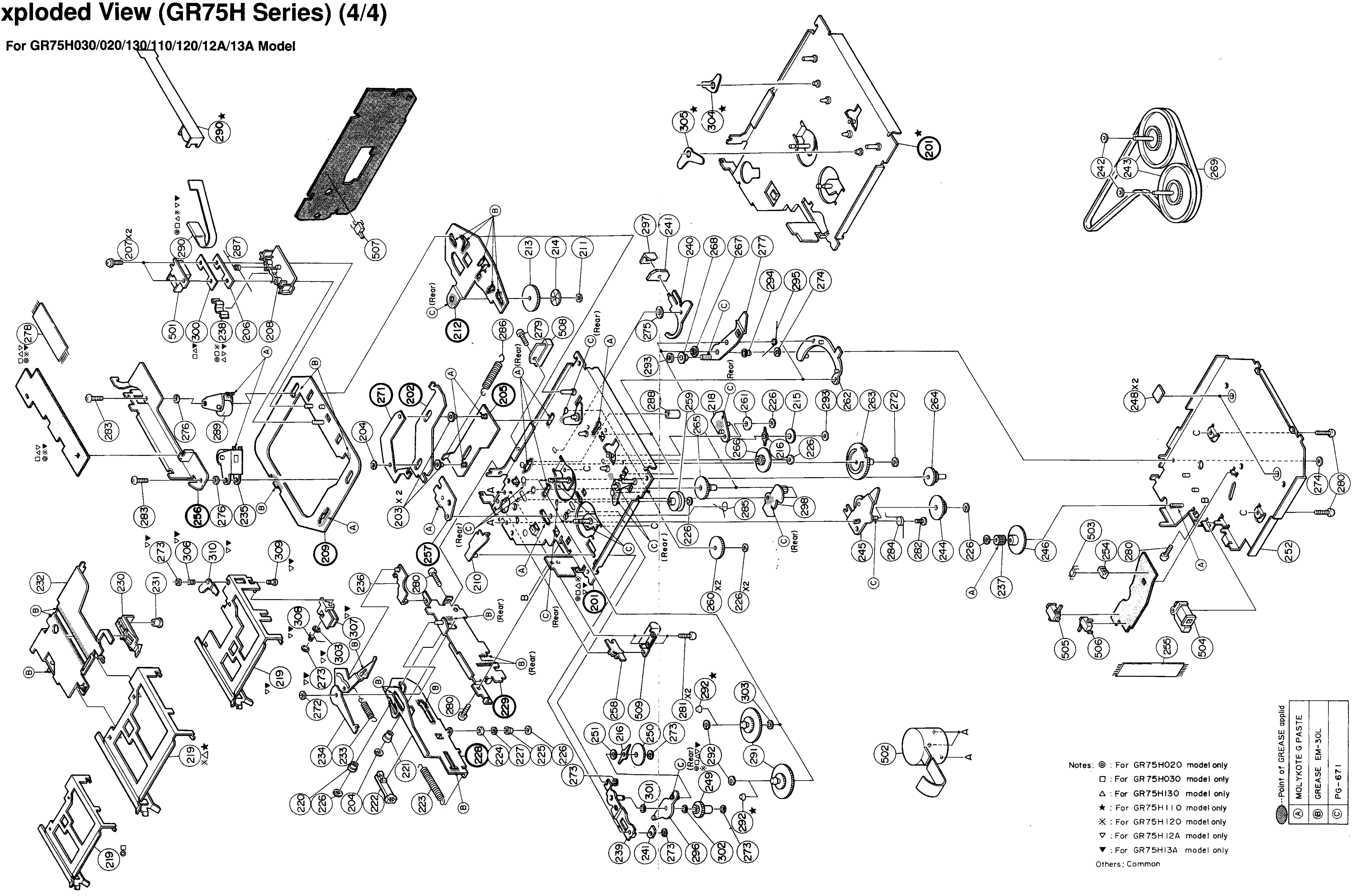
Symbol No.	IN-dex	Part No.	Description
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
271	3-E	41A30475W01	Spring, Clutch
272	3-F	04B41345P15	Washer, Lock(M1.2)
273		04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276	3-B	04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch(M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T35271W01	Head P.C. Board
291	4-E	01T35403W02	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)

Symbol No.	IN-dex	Part No.	Description
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	3-C	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid
301	2-B	41A41416W01	Spring, Head
Miscellaneous			
501	2-B	88T15971W01	Head
☆ 502	4-E	01V23900W60	Assy., Motor(13.2V-105mA)
◇ 502	4-E	01V44200W73	Assy., Motor(13.2V-80mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

Exploded View (GR75H Series) (4/4)

- **For GR75H030/020/130/110/120/12A/13A Model**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Notes:
◎ : For GR75H020 model only
□ : For GR75H030 model only
△ : For GR75H130 model only
★ : For GR75H110 model only
※ : For GR75H120 model only
▽ : For GR75H12A model only
▼ : For GR75H13A model only
Others : Common

▨ ···Point of GREASE applid

Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75H Series) (4/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
◎	203	3-C	43A51119W01	Roller, Sub Head
□	203	3-C	43A51119W01	Roller, Sub Head
※	203	3-C	43A31453W01	Roller, Sub Head
△	203	3-C	43A31453W01	Roller, Sub Head
▽	203	3-C	43A31453W01	Roller, Sub Head
▼	203	3-C	43A31453W01	Roller, Sub Head
★	203	3-C	43A31453W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A31756W01	Spring, Head
	207	2-A	03A38021W01	Screw, Flange(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A30462W01	Assy., Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A58039W01	Reflector
	215	3-E	44A30480W01	Gear, Planet
	216		41A30475W01	Spring, Clutch
	218	3-E	01A30824W01	Assy., Riv Lever Reverse
◎	219	5-A	07B40283W01	Holder, Cassette
□	219	5-A	07B40283W01	Holder, Cassette
△	219	5-B	07B40012W01	Holder, Cassette
※	219	5-B	07B40012W01	Holder, Cassette
★	219	5-B	07B40012W01	Holder, Cassette
▽	219	4-B	01A51158W01	Assy., Riv Cassete Holder
▼	219	4-B	01A51158W01	Assy., Riv Cassete Holder
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
◎	223	5-C	41B10386W03	Spring, GR(Rack)
□	223	5-C	41B10386W03	Spring, GR(Rack)
△	223	5-C	41B10386W04	Spring, GR(Rack)
★	223	5-C	41B10386W04	Spring, GR(Rack)
※	223	5-C	41B10386W04	Spring, GR(Rack)
▽	223	5-C	41B10386W04	Spring, GR(Rack)
▼	223	5-C	41B10386W04	Spring, GR(Rack)
	224	5-C	43A10121W01	Roller, Eject A
	225	5-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	5-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
◎	232	4-A	01A10212W01	Assy., Riv Plate Base
□	232	4-A	01A10212W01	Assy., Riv Plate Base
△	232	4-A	01A40024W01	Assy., Riv Plate Base
★	232	4-A	01A40024W01	Assy., Riv Plate Base
※	232	4-A	01A40024W01	Assy., Riv Plate Base
▽	232	4-A	01A40024W01	Assy., Riv Plate Base
▼	232	4-A	01A40024W01	Assy., Riv Plate Base
◎	233	5-C	41B10386W01	Spring, Eject Arm
□	233	5-C	41B10386W01	Spring, Eject Arm
△	233	5-C	41B63283F11	Spring
★	233	5-C	41B63283F11	Spring
※	233	5-C	41B63283F11	Spring
▽	233	5-C	41B63283F11	Spring
▼	233	5-C	41B63283F11	Spring
◎	234	5-C	01A30883W01	Assy., Riv Eject Arm B
□	234	5-C	01A30883W01	Assy., Riv Eject Arm B
△	234	5-C	01A40021W01	Assy., Riv Eject Arm D
★	234	5-C	01A40021W01	Assy., Riv Eject Arm D
※	234	5-C	01A40021W01	Assy., Riv Eject Arm D
▽	234	5-C	01A40021W01	Assy., Riv Eject Arm D
▼	234	5-C	01A40021W01	Assy., Riv Eject Arm D
	235	3-B	01B30863W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A20314W01	Pinion, Eject
◎	238	2-B	26A20537W01	Shield, plate
□	238	2-B	26A20537W01	Shield, plate
※	238	2-B	26A20537W01	Shield, plate
△	238	2-B	26A20537W01	Shield, plate
▽	238	2-B	26A20537W01	Shield, plate
▼	238	2-B	26A20537W01	Shield, plate
	239	5-D	01A40881W01	Assy., Riv RF Link
	240	2-D	45A40725W01	Lever, Play Sol.
	241		76T10374W01	Chip
◎	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
□	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
※	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
△	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
▽	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
▼	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
★	242	1-G	04T55449W01	Washer, Teflon(M2.1)
◎	243	1-G	01A30488W01	Assy., Flywheel
□	243	1-G	01A30488W01	Assy., Flywheel
※	243	1-G	01A30488W01	Assy., Flywheel
△	243	1-G	01A30488W01	Assy., Flywheel
▽	243	1-G	01A30488W01	Assy., Flywheel
▼	243	1-G	01A30488W01	Assy., Flywheel
★	243	1-G	01A50658W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch A

Notes:◎ ; For GR75H020 model only　□ ; For GR75H030 model only
▽ ; For GR75H12A model only　△ ; For GR75H130 model only
★ ; For GR75H110 model only　※ ; For GR75H120 model only
▼ ; For GR75H13A model only　Others ; Common

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	246	3-F	44A10145W01	Gear. Eject
	248	3-G	43A41656W01	Spacer. UHMW
	249	5-E	44A30481W01	Gear. RF Idler
	250	4-D	44A30483W01	Gear. RF
	251	4-D	04S40075G58	Washer. Polyslider(M2.1)
	252	3-H	01A30463W01	Assy.. Riv. Cover Bottom
	254	3-G	15B11065W01	Guide. Photo
	255	4-G	30T15126W01	Wire. PC Sensor(7P)
	258	4-D	45A10101W01	Lever. Eject Sol
	259	3-D	49A30476W01	Pulley. Idler
	260	4-E	44A30482W01	Gear. Take Up
	261	3-E	44A30478W01	Gear. Sun
◎	262	3-E	44B10135W01	Gear. Fix
□	262	3-E	44B10135W01	Gear. Fix
★	262	3-E	44B10135W01	Gear. Fix
※	262	3-E	44B10135W01	Gear. Fix
△	262	3-E	44B10135W01	Gear. Fix
▼	262	3-E	44B10135W01	Gear. Fix
▽	262	3-E	44B10135W02	Gear. Fix
	263	3-E	44B30484W01	Gear. Pause
	264	3-F	44A10137W01	Gear. Pause Idler A
	265	3-E	44A30486W01	Gear. Pause Idler B
	266	3-E	44A30479W01	Gear. Reverse Idler
	267	2-E	44A30485W01	Gear. Motor Idler
	268	2-E	44A30487W01	Gear. Motor Clutch
	269	1-G	42A31850W01	Belt. GR
	272		04B41345P15	Washer. Lock(M1.2)
	273		04B41345P02	Washer. Lock(M1.7)
	274		04B41345P17	Washer. Lock(M1)
	275	2-D	04B41345P30	Washer. Lock(M3.1)
	276		04B41345P32	Washer. Lock(M3.1)
	277	2-E	01A30464W01	Assy.. Riv Play Clutch
◎	278	2-A	30T15126W02	Wire. PC Joint 7P
□	278	2-A	30T15126W02	Wire. PC Joint 7P
※	278	2-A	30T15126W02	Wire. PC Joint 7P
△	278	2-A	30T15126W02	Wire. PC Joint 7P
▽	278	2-A	30T15126W02	Wire. PC Joint 7P
▼	278	2-A	30T15126W02	Wire. PC Joint 7P
	279	2-D	03S44205G78	Screw. Pan(M2x6)
	280		03S44205G30	Screw. Pan(M2.6x4)
	281	4-D	03S72235F53	Screw. Pan(M2x3.3)
	282	3-F	03A12132W02	Screw. Eject Clutch(M2x2.3)
	283		03S43997P64	Screw. Pan(M1.7x3)
	284	3-F	41A10384W01	Spring. Eject Clutch
	285	3-E	41A10385W01	Spring. Cassette Push
	286	2-C	41B10386W02	Spring. Sub Head
	287	2-B	41A10387W01	Spring. Pinch Roller
	288	3-D	43A12719W01	Roller. Pause
	289	3-B	01B30863W01	Assy.. Pinch Roller
◎	290	2-B	84T25151W01	Head P.C. Board
※	290	2-B	84T25151W01	Head P.C. Board
▽	290	2-B	84T25151W01	Head P.C. Board
□	290	2-B	84T35271W01	Head P.C. Board
△	290	2-B	84T35271W01	Head P.C. Board
▼	290	2-B	84T35271W01	Head P.C. Board
★	290	1-B	84T45462W01	Head P.C. Board
◎	291	5-E	01T35403W01	Assy.. Reel
□	291	5-E	01T35403W01	Assy.. Reel
※	291	5-E	01T35403W01	Assy.. Reel
△	291	5-E	01T35403W01	Assy.. Reel
▽	291	5-E	01T35403W01	Assy.. Reel
▼	291	5-E	01T35403W01	Assy.. Reel
★	291	5-E	01T45062W01	Assy.. Reel
◎	292	5-E	04B41345P12	Washer. Lock(M1.7)
□	292	5-E	04B41345P12	Washer. Lock(M1.7)
※	292	5-E	04B41345P12	Washer. Lock(M1.7)
△	292	5-E	04B41345P12	Washer. Lock(M1.7)
▽	292	5-E	04B41345P12	Washer. Lock(M1.7)
▼	292	5-E	04B41345P12	Washer. Lock(M1.7)
★	292		49A40718W01	Reel. Cap
	293		04B41345P35	Washer. Lock(M1.7)
	294	2-E	43A30827W01	Spacer. Motor Idler
	295	2-E	41A30490W01	Spring. Play Clutch
	296	5-E	01A40882W01	Assy.. Riv Lever RF
	297	2-D	43A41744W01	Lock. Solenoid
	298	3-E	01A10201W02	Assy. Riv Lever Pause
□	300	2-B	41A41416W01	Spring. Head
△	300	2-B	41A41416W01	Spring. Head
▼	300	2-B	41A41416W01	Spring. Head
	301	5-D	04S40075G63	Washer. Polyslider(M2.1)
	302	5-E	04S40075G62	Washer. Polyslider(M2.1)
	303		04S40075G05	Washer. Polyslider(M2.1)
★	304	1-E	01A50659W01	Assy.. Riv Pinch Roller(N)
★	305	1-E	01A50660W01	Assy.. Riv Pinch Roller(R)
▽	306	3-B	41A50970W01	Spring. Push Holder
▼	306	3-B	41A50970W01	Spring. Push Holder
▽	307	4-C	01A51160W01	Assy.. Link Felt Guide
▼	307	4-C	01A51160W01	Assy.. Link Felt Guide
▽	308	4-B	41A50969W01	Spring. Holder
▼	308	4-B	41A50969W01	Spring. Holder

Notes:◎ ; For GR75H020 model only □ ; For GR75H030 model only ★ ; For GR75H110 model only ※ ; For GR75H120 model only
▽ ; For GR75H12A model only △ ; For GR75H130 model only ▼ ; For GR75H13A model only Others ; Common

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
▽	309	3-B	46A50946W01	Stud. Holder Cassete
▼	309	3-B	46A50946W01	Stud. Holder Cassete
▽	310	3-B	01A51159W01	Assy., Riv Lever Push Holder
▼	310	3-B	01A51159W01	Assy., Riv Lever Push Holder
Miscellaneous				
◎	501	2-B	88T15971W02	Head
※	501	2-B	88T15971W02	Head
▽	501	2-B	88T15971W02	Head
□	501	2-B	88T35406W01	Head
△	501	2-B	88T35406W01	Head
▼	501	2-B	88T35406W01	Head
★	501	2-B	88T10373W01	Head
◎	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
□	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
△	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
▼	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
▽	502	5-F	01V51800W42	Assy., Motor(13.2V-105mA)
※	502	F-5	01V51800W42	Assy., Motor(13.2V-105mA)
★	502	F-5	01V53200W99	Assy., Motor(13.2V-105mA)
	503	3-G	51T15144W01	Sensor. Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector(Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector(Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Symbol No.		IN-dex	Part No.	Description

Notes:◎ ; For GR75H020 model only　□ ; For GR75H030 model only
▽ ; For GR75H12A model only　△ ; For GR75H130 model only

★ ; For GR75H110 model only　※ ; For GR75H120 model only
▼ ; For GR75H13A model only　Others ; Common

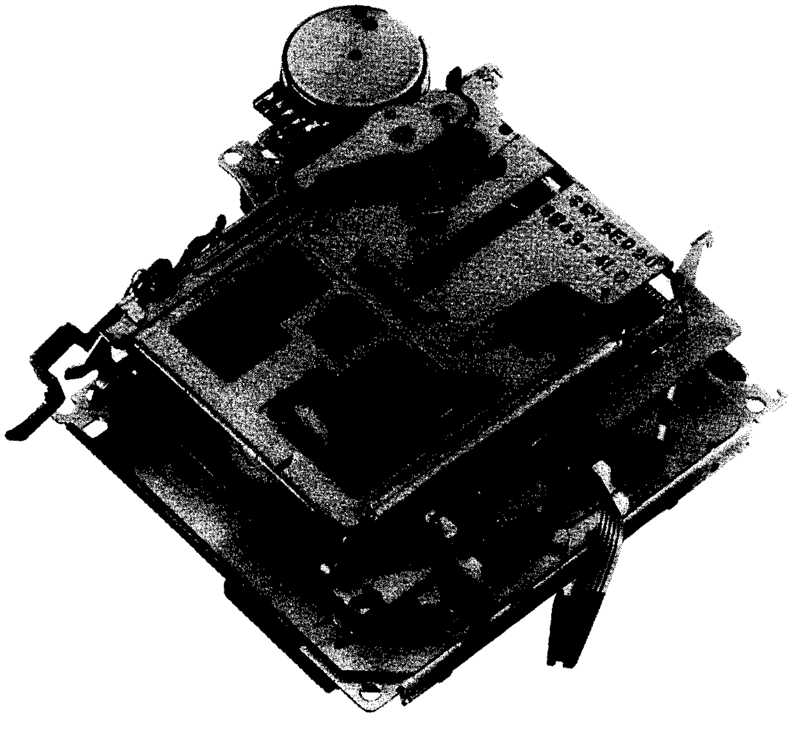
ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (VII)

- This manual is described on GR75H12H only. The GR75H12H is developed from GR75H SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR/GR-Y SERIES - ADDENDUM & REVISED (VI) (68P20504W07).
- 当マニュアルはGR75H12Hについてのみ記載してます。又、GR75Hシリーズがベースモデルとなってますので、相違部分のみを記載してあります。
  詳細については、GR/GR-Yシリーズ (改訂・追補版 - VI) (68P20505W07)を参照願います。



GR/GR-Y SERIES

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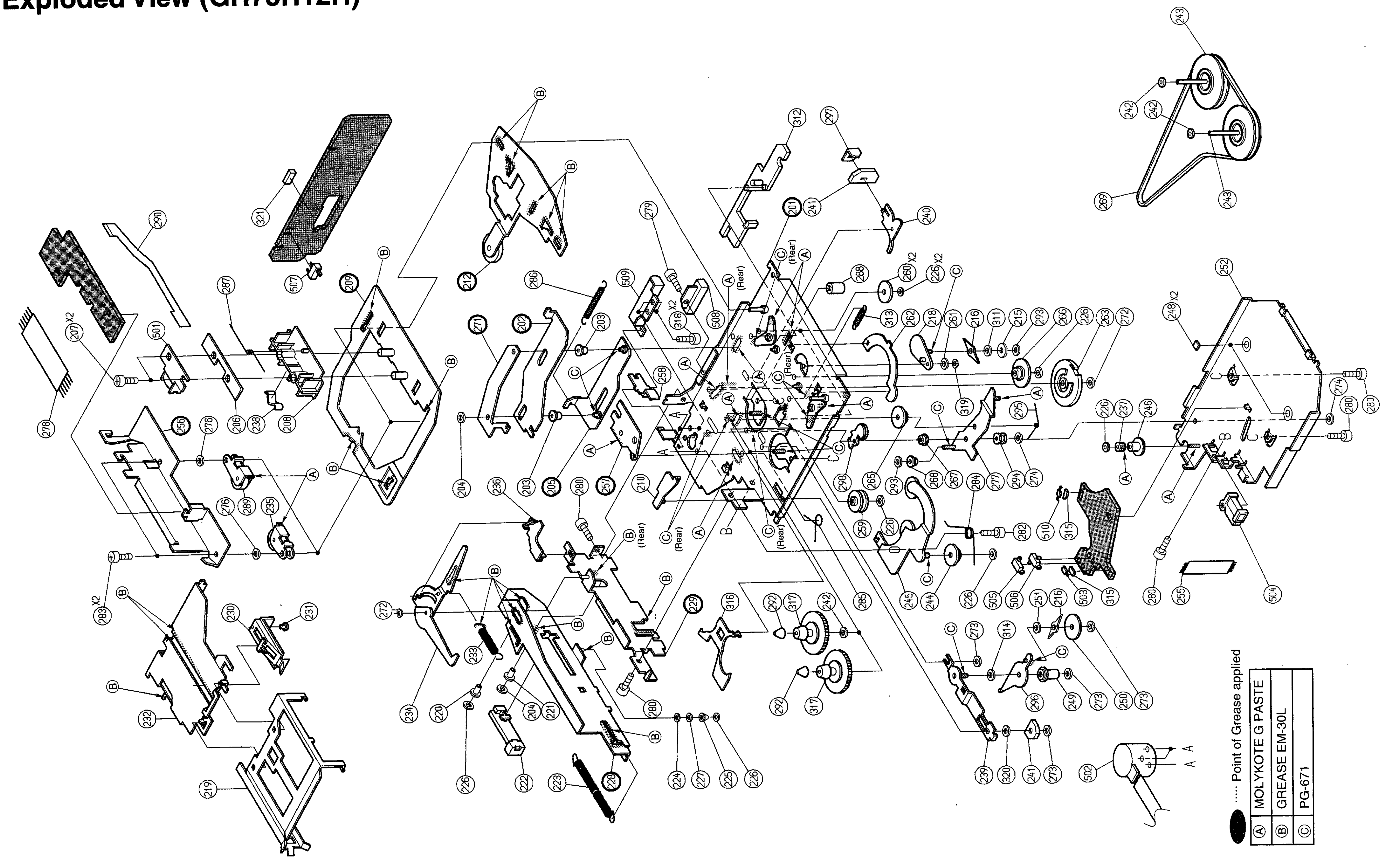
Exploded View (GR75H12H)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- ●…… Point of Grease applied
- Ⓐ MOLYKOTE G PASTE
- Ⓑ GREASE EM-30L
- Ⓒ PG-671

Cassette Deck Mechanism Assembly Parts List

Symbol No.	Index	Part No.	Description
203		43A51119W01	Roller, Sub Head
204		04B41345P01	Washer, Lock (M1.2)
206	3-B	41A31756W01	Spring, Head (GR-Y)
207	2-A	03A38021W01	Screw, Flange (M2×4)
208	3-B	43B12545W01	Tape, Guide
210	3-D	01A30462W01	Assy., Riv. Lever R / F Sol.
215	2-F	44A30480W01	Gear, Planet
216		41A30475W01	Spring, Clutch
218	2-F	01A30824W01	Assy., Riv. Lever Reverse
219	5-B	07B40012W01	Holder, Cassette
220	4-C	43A12583W01	Roller, Eject
221	4-D	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-D	41B10386W05	Spring, GR (Rack)
224	5-D	43A10121W01	Roller, Eject (A)
225	5-D	43A71257W01	Roller, Eject (B)
226		04B41345P11	Washer, Lock (M1.2)
227	5-D	43A12377W01	Roller, Eject (C)
230	4-B	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-B	01A40024W01	Assy., Riv. Plate Base
233	4-C	41B63283F11	Spring
234	4-C	01A40021W01	Assy., Riv. Eject Arm (D)
235	3-B	01B30863W02	Assy., Pinch Roller
236	3-C	45A10087W01	Lever, Pack In Switch
237	3-G	44A20314W01	Pinion, Eject
238	3-B	26A20537W01	Shield, Plate
239	5-F	01A40881W01	Assy., Riv. RF Link
240	2-F	45A40725W01	Lever, Play Sol.
241		76T10374W01	Chip
242	4-E	04S40075G05	Washer, Polyslider (M2.1)
243		01A30488W01	Assy., Flywheel
244	4-F	44A10141W01	Gear, Eject Idler
245	4-E	01A70048W01	Assy., Riv. Lever Clutch
246	3-G	44A10145W01	Gear, Eject
248	2-G	43A41656W01	Spacer, UHMW
249	4-F	44A30481W01	Gear, RF Idler
250	4-G	44A30483W01	Gear, RF
251	4-F	04S40075G58	Washer, Polyslider (M2.1)
252	2-G	01A71527W01	Assy., Riv. Cover Bottom
255	4-G	30T15126W10	Wire, PC Sensor (9P)
258	3-D	45A10101W01	Lever, Eject Sol.
259	3-E	49A30476W01	Pulley, Idler
260	2-E	44A30482W01	Gear, Take Up
261	2-F	44A30478W01	Gear, Sun
262	2-E	44B10135W02	Gear, Fix
263	2-F	44B70042W01	Gear, Pause
265	3-E	44A70044W01	Gear, Pause Idler (B)
266	2-F	44A30479W01	Gear, Reverse Idler
267	3-F	44A30485W01	Gear, Motor Idler

Symbol No.	Index	Part No.	Description
268	3-F	44A30487W01	Gear, Motor Clutch
269	2-F	42A31850W02	Belt, GR-H
272		04B41345P15	Washer, Lock (M1.2)
273		04B41345P02	Washer, Lock (M1.7)
274		04B41345P17	Washer, Lock (M1)
276	3-B	04B41345P32	Washer, Lock (M3.1)
277	3-F	01A30464W01	Assy., Riv. Play Clutch
278	3-A	30T15126W02	Wire, PC Joint (7P)
279	2-D	03S44205G78	Screw, Pan (M2×6)
280		03S44205G30	Screw, Pan (M2.6×4)
282	3-F	03A12132W03	Screw, Eject Clutch (M2×2.3)
283	4-A	03S43997P64	Screw, Pan (M1.7×3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	4-E	41A10385W01	Spring, Cassette Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	2-E	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T25151W01	Head P.C.Board
292	4-E	49A40718W01	Reel, Cap
293		04B41345P35	Washer, Lock (M1.7)
294	3-F	43A30827W01	Spacer, Motor Idler
295	3-F	41A30490W01	Spring, Play Clutch
296	4-F	01A40882W01	Assy., Riv. Lever RF
297	1-E	43A41744W01	Lock, Solenoid
298	3-E	01A70940W01	Assy., Riv. Lever Pause
311	2-F	04B41345P46	Washer, Lock (M2.1)
312	1-E	45A70860W01	Dumper, Sub Head
313	2-E	41A71549W01	Spring, Reel Brake
314	4-F	04S40075G68	Washer, Polyslider (M2.1)
315		15A71833W01	Guide, Photo
316	4-D	01A71704W01	Assy., Riv. Lever Brake
317	4-E	01A45062W03	Assy., Panel
318	2-D	03S94385F47	Screw, Pan Nylok (M2×3.3)
319	3-F	04B41345P18	Washer, Lock (M1.2)
320	5-F	41A10097W02	Spring, Clutch
321	2-B	14A71558W01	Insulator, Cover

Miscellaneous

Symbol No.	Index	Part No.	Description
501	2-B	88T15971W03	Head
502	5-F	01V51800W42	Assy., Motor (13.2V-105mA)
503	4-F	51T15144W02	Sensor, Photo ON2170-R1
504	4-G	01T10371W01	Assy., R / F Solenoid
505	4-F	40T15382W01	Switch, Detector (PACK DOWN)
506	4-F	40T15382W01	Switch, Detector (METAL)
507	2-B	40T15222W01	Switch, Detector (PACK IN)
508	2-D	01T15249W01	Assy., Play Solenoid
509	2-D	01T10369W02	Assy., Eject Solenoid
510	3-F	51T15144W02	Sensor, Photo ON2170-R1